



APPRAISAL REPORT

FISHING SECTOR SUPPORT PROJECT

REPUBLIC OF GUINEA BISSAU

NB: This document contains errata or corrigenda (see Annexes)

**COUNTRY DEPARTMENT
WEST REGION**

**OCDW
MARCH 2001**

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This report was prepared by Messrs. A.K. Dia, Fisheries Expert/Head of Mission and T. Bedingar, Agro-Economist, following their two missions to the Republic of Guinea-Bissau in March 1998 and February 2001. Questions should be addressed to the authors and Mr. C.R. Spencer, Division Manager, OCDW.3 (Ext. 4152).

AFRICAN DEVELOPMENT FUND
01 B.P. 1387 ABIDJAN 01
Tel.: 20.42.74

PROJECT BRIEF

Date: March 2001

The information given hereunder is intended to provide some guidance to prospective suppliers, contractors, consultants and all persons interested in the procurement of goods and services for projects approved by the Board of Directors of the Bank Group. More detailed information could be obtained from the executing agency and the Borrower.

1. **COUNTRY** : Republic of Guinea-Bissau
2. **PROJECT NAME** : Fishing Sector Support
3. **LOCATION** : Throughout the country
4. **BORROWER** : Republic of Guinea-Bissau
5. **EXECUTING AGENCY** : Ministry of Fisheries, B.P.1035 Bissau,
Guinea-Bissau
Fax: (245) 20.37.48
Tel.: (245) 20.11.57

6 **DESCRIPTION:**

The aim of the fishing sector support project is to promote industrial fishing. In that regard, provision has been made for the following: (i) training (ii) support to the private sector; (iii) fisheries research; (iv) fisheries monitoring and supervision; (v) landing infrastructure; (vi) project management.

7. **PROJECT COST** : UA 6.64 million
 - i) Foreign exchange cost : UA 5.22 million
 - ii) Local currency cost : UA 1.42 million
8. **ADF LOAN** : UA 4.29 million
TAF GRANT : UA 1.70 million
9. **OTHER SOURCES OF FINANCE**
Government of Guinea-Bissau : UA 0.65 million
10. **LOAN APPROVAL DATE** : April 2001
11. **PROBABLE START-UP DATE**
Start up :
Duration : 4 years

12. **PROCUREMENT OF GOODS AND SERVICES:**

- Competitive bidding on the basis of a short list for the recruitment of engineering consulting firms to supervise construction works, technical assistance and the audit firm;
- International competitive bidding for the construction of a fishing quay, procurement of vessels and vehicles, office equipment and furniture;
- National competition for the construction of bases of the maritime surveillance centre.

CURRENCY EQUIVALENTS

UA 1 = FCFA 916.06
US \$ 1 = FCFA 705.86

WEIGHTS AND MEASUREMENTS

Metric system
1 nautical mile = 1852.184 metres

FINANCIAL YEAR

1 January – 31 December

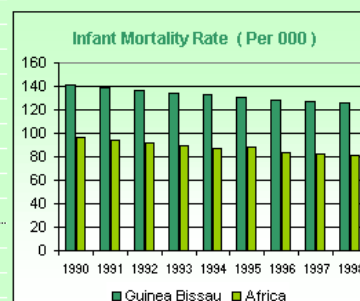
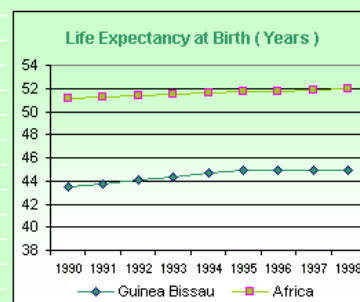
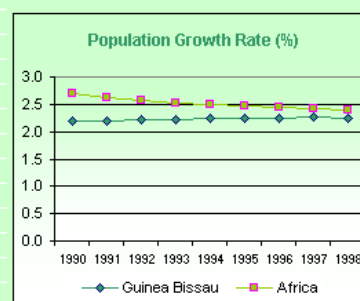
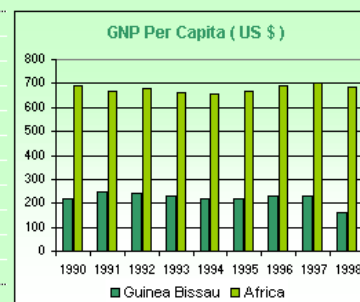
Date: February 2001

ACRONYMS AND ABBREVIATIONS

ADB	:	African Development Bank
ADF	:	African Development Fund
AFD	:	Agence Française de Développement
AMTA	:	Agricultural Management Training for Africa
CIDA	:	Canadian International Development Agency
CIPA	:	Applied Fisheries Research Centre (Centre d'investigation des pêches Appliquées)
ECC	:	European Committee Commission
EEZ	:	Exclusive Economic Zone
EU	:	European Union
FAO	:	Food and Agricultural Organization
FISCMAR	:	Maritime Tax Centre (Centre de fiscalisation maritime)
GDP	:	Gross Domestic Product
GT	:	Gross Tonnage
ICB	:	International Competitive Bidding
IS	:	International Shopping
IUCN	:	International Union for the Conservation of Nature
LCB	:	Local Competitive Bidding
LS	:	Local Shopping
PRODEPA	:	Advanced Artisanal Fishing Development Project
SL	:	Short List
TAF	:	Technical Assistance Fund
UA	:	Unit of Account
UEMOA	:	West African Economic and Monetary Union (Union Économique Monétaire Ouest Africaine)
USAID	:	United States Agency for International Development

GUINEA BISSAU : BASIC DATA SHEET **COMPARATIVE SOCIO-ECONOMIC INDICATORS**

	Year	Guinea Bissau	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km ²)		36	30,061	80,976	54,658
Total Population (millions)	1998	1.2	748.0	4,718.9	1,182.2
Urban Population (% of Total)	1998	22.5	38.2	39.6	75.6
Population Density (per Km ²)	1998	32.1	24.9	58.3	21.6
GNP per Capita (US \$)	1998	160	687	1,250	25,890
Labor Force Participation - Total (%)	1998	47.0	43.7	...	...
Labor Force Participation - Female (%)	1998	19.0	37.0	...	...
Gender -Related Development Index Value	1997	0.3	0.5	0.6	0.9
Human Development Index (Rank among 174 countries)	1997	168	n.a.	n.a.	n.a.
Population Living Below \$ 1 a Day (% of Population)	1991	88.2	45.0	32.2	...
Demographic Indicators					
Population Growth Rate - Total (%)	1998	2.2	2.4	1.6	0.3
Population Growth Rate - Urban (%)	1998	3.8	4.3	3.1	0.6
Population < 15 years (%)	1998	42.6	42.9	33.2	18.8
Population >= 65 years (%)	1998	4.1	3.2	19.7	26.7
Dependency Ratio (%)	1998	87.8	86.9	61.7	48.8
Sex Ratio (per 100 female)	1998	96.9	99.3	103.3	94.8
Female Population 15-49 years (millions)	1998	0.3	176.2	1,213.4	296.8
Life Expectancy at Birth - Total (years)	1998	44.9	52.7	64.0	75.4
Life Expectancy at Birth - Female (years)	1998	46.4	53.4	65.8	79.1
Crude Birth Rate (per 1,000)	1998	41.0	37.7	23.8	11.0
Crude Death Rate (per 1,000)	1998	19.7	13.7	8.4	10.3
Infant Mortality Rate (per 1,000)	1998	125.4	80.7	58.9	9.0
Child Mortality Rate (per 1,000)	1998	185.8	116.1	76.2	10.4
Maternal Mortality Rate (per 100,000)	1996	910	698	488	30
Total Fertility Rate (per woman)	1998	5.5	5.0	2.9	1.6
Women Using Contraception (%)	1986-95	...	...	56.0	70.0
Health & Nutrition Indicators					
Physicians (per 100,000 people)	1990-96	18	23	76	253
Nurses (per 100,000 people)	1988-96	45	89	85	780
Births attended by Trained Health Personnel (%)	1986-87	39	...	54	99
Access to Safe Water (% of Population)	1990-97	27	55	72	100
Access to Health Services (% of Population)	1995	40	60	80	100
Access to Sanitation (% of Population)	1990-97	46	45	43	100
Percentage of Adults (aged 15-49) Living with HIV/AIDS	1997	2.3	5.7	...	...
Incidence of Tuberculosis (per 100,000)	1995	220	201	157	24
Child Immunization Against Tuberculosis (%)	1996	82	77	88	93
Child Immunization Against Measles (%)	1996	51	63	79	90
Underweight Children (% of children under 5 years)	1990-97	23	26	31	...
Daily Calorie Supply	1996	2,462	2,406	2,650	3,222
Public Expenditure on Health (as % of GDP)	1995-97	1.1	1.4	1.8	6.3
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	1994	61.8	79.5	100.0	103.0
Primary School - Female	1994	45.3	73.0	93.8	103.2
Secondary School - Total	1994	...	28.3	50.4	100.3
Secondary School - Female	1994	...	25.7	45.3	101.8
Primary School Female Teaching Staff (% of Total)	1994	...	45.0	51.0	82.0
Adult Illiteracy Rate - Total (%)	1997	66.4	43.5	28.2	1.3
Adult Illiteracy Rate - Male (%)	1997	50.3	33.0	19.6	1.0
Adult Illiteracy Rate - Female (%)	1997	81.7	51.6	35.8	1.5
Percentage of GDP Spent on Education	1995	...	3.5	3.9	6.9
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	1996	10.7	5.9	9.9	11.6
Annual Rate of Deforestation (%)	1990-95	0.4	0.7	0.4	-0.2
Annual Rate of Reforestation (%)	1980-90	...	4.0	...	...
Per Capita CO2 Emissions (metric tons)	1996	0.2	1.1	2.1	12.5



Source : Compiled by the Statistics Division from ADB databases; UNAIDS; World Bank Live Database and United Nations Population Division.

Notes: n.a. Not Applicable
... Data Not Available

ANALYTICAL SUMMARY

Project Context

The economy of Guinea-Bissau depends mostly on agriculture and fishing. Although agriculture predominates and accounts for 54% of the GDP and 93% of exports, it is subject to several constraints and its poor performance is at the origin of difficulties facing the country. With significant fishery resources, the fishing sector offers the most immediate development potential. For that reason, the Government has decided to make it an economic development fulcrum. In view of the disastrous economic situation at the end of the civil war, the Government chose to turn fishing into an economic development base in order to diversify its financial resources, create jobs and contribute to poverty reduction through **private investment** incentives. Within that purview, the Bank Group received a request to fund the project under discussion. The project proposed is in line with the country's macro-economic policy which aims at strengthening the people's food security and reducing poverty. It also falls within the context of Bank Group strategy for Guinea-Bissau which lays emphasis on poverty reduction.

Aim of the Loan and the Grant

The ADF loan of UA 4.29 million accounting for 65% of total project cost will cover 69% of the foreign exchange cost (UA 3.62 million) and UA 670 000 of the local currency cost. The TAF grant of UA 1.70 million represents 25% of total project cost and will fund 31% of the foreign exchange cost.

Sectoral Aim and Objective(s) of the Project and the Grant

The project will generate the following sectoral gains: strengthen food security and reduce poverty. The project objective is to promote fishing nationwide.

Brief Description of Project Achievements

The key project achievements will include:

- (i) Institution building and refresher training of 201 and 91 persons on production and administrative supervision, respectively;
- (ii) An enabling environment for private sector participation in industrial fishing thanks to an attractive investment code;
- (iii) Favourable conditions for artisanal and industrial production landing by building a 360 metre fishing quay and development of 2 ha for onshore industries, repair workshops, market, etc.;
- (iv) Rational fishery resource management through supportive research and maritime surveillance with the procurement of 3 surveillance vessels and rational stock management;
- (v) Organization, management and provision of necessary staff and resources for the smooth implementation of project activities.

Project Cost

The project is estimated to cost UA 6.62 million, of which UA 5.22 million (79%) and UA 1.40 million (21%) in foreign exchange and local currency, respectively.

Sources of Finance

The African Development Fund, the Technical Assistance Fund and the Government of Guinea-Bissau will fund the project. ADF resources will cover fishery resource management, supportive research and project management. The Grant will fund training and technical assistance staff. The UA 4.29 million ADF loan and the TAF grant account for 65% and 25% of the project cost, in that order. The Government of Guinea-Bissau will contribute UA 0.65 million or 10% of total project cost.

Project Implementation

The Ministry of Agriculture and Fisheries will implement the project over four years. The Director of Fisheries will manage the project with the support of a principal technical assistance staff and two Bissau Guinean managers (fisheries biologist and fisheries economist). The support staff will include an accountant and an administrative assistant recruited from the job market; the Government will supply a secretary and two drivers. The “Maritime Monitoring and Surveillance” component will be implemented through an agreement with FISCMAR and CIPA, respectively. The project management team, assisted by two experts (attorney in maritime law and a financial economist), each on a twelve-month contract, will implement other project components.

Conclusion and Recommendations

Guinea-Bissau has considerable fishery resources untapped by the national fleet owing to sectoral constraints. Having ended the civil war, the country is focusing on developing fishing with a view to diversifying its financial resources, creating jobs and reducing poverty through private investment incentives. Effective coastal surveillance will check fishing by unauthorized vessels, thus allowing for the protection and rational management of available resources. The range of training planned (250 youths) will help to improve the performance of officials responsible for fisheries and develop the entrepreneurial spirit among fishermen and specialized workers in the sector. The construction of the quay will play a role in creating the enabling conditions for the emergence of a national artisanal fishing sector and improve seafood landing capacity by 4 050 tonnes. That, in turn, will lead to the creation of industries and related services onshore as well as generate several jobs.

Furthermore, thanks to the improvement of fishery resources made possible by the supportive research component, the project will permit the quantitative and qualitative monitoring of the fisheries stock, thus giving the country’s officials precious information to enable them to rationally manage such resources. Moreover, the financial and economic analyses show artisanal fishing activities to be viable. Under such conditions, the project will contribute to strengthening food security and reducing poverty. The Fishing Sector Support Project is technically feasible, economically viable and socially desirable.

It is recommended that the Government of Guinea-Bissau be extended a loan not exceeding UA 4.2 million from ADF resources and a grant of UA 1.70 million to implement the project described herein, subject to the conditions set forth in the loan agreement.

MATRIX OF THE FISHING SECTOR SUPPORT PROJECT

HIERARCHY OF OBJECTIVES (HO)	VERIFIABLE INDICATORS (VI)	MEANS OF VERIFICATION	ASSUMPTIONS/RISKS
1. <u>SECTORAL OBJECTIVE</u> Strengthen the country's food security	Fish consumption increases from 26kg/inh./annum to 28kg/inh./annum in 2005	Plan surveys and statistics.	
2. <u>PROJECT OBJECTIVE</u> Promote fishing nationwide	National production landings increase from 5 400 t in 2003 to 9 450 t in 2005	Project and CIPA activity report	Effective national fishing promotion.
3. <u>ACHIEVEMENTS</u>			
3.1 Enhance fisheries administration	3.1 201 and 91 persons trained in production and administration, respectively	3.1 Quarterly and annual activity reports, supervision reports	3.1 Training adequately dispensed.
3.2 Create an enabling institutional and socio-economic environment for private sector participation	3.2 The fishing investment code passed	3.2 Publication in the country's official gazette	3.2 Water, electricity and communication services exist.
3.3 Build onshore infrastructure	3.3 A 380 linear metre quay, a market and repair workshops built	3.3 Project activity report	3.3 Adequate implementation of contracts with FISCMAR and CIPA.
3.4 Better manage fishery resources	3.4 3 surveillance vessels procured, near-zero boarding and inspection tax, rational distribution of fishing licenses	3.4 Project activity report	Short gap in signature transmission, rapid contract and disbursement approval
3.5 Management unit operational	3.5 Project unit set up; contracts and markets properly managed	Idem	

4. ACTIVITIES	BUDGET RESOURCES		
4.1 Sectoral Support	1. <u>Financing</u>		
4.1.1 Training of government officials and private sector managers	ADF UA 4.29 million		4.1 Resources put at project disposal are available.
4.1.2 Fishery resource evaluation campaign	TAF UA 1.70 million		
4.1.3 Preparation of the investment code	GOVT UA 0.65 million		
4.2 Coastal Monitoring and Surveillance	TOTAL UA 6.64 million		
4.2.1 Bid preparation for the construction of Surveillance Centre bases	2. <u>Budget</u>		
4.2.2 Equipment procurement	Institution building 2.00	List of goods and services	
4.2.3 Coastal surveillance	Monitoring and supervision 1.75		
4.3 Strengthening of Fishing Infrastructure	Infrastructure support 2.29		
4.3.1 Bid preparation for the construction of fishing infrastructure and platform improvement	Project management 0.60		
	TOTAL 6.64		
4.4 Project Management	<u>Human Resources</u>		
4.4.1 Recruitment of technical assistance and local staff	National managers		
4.4.2 Recruitment of consultants to supervise works	Technical assistance		
4.4.3 Preparation of bidding documents for equipment procurement	Consultants		
4.4.4 Organization of follow-up seminars			

1. **INTRODUCTION**

1.1 **Project Genesis and Background**

1.1.1 Guinea-Bissau covers an area of 36 125 km² with a population estimated at 1 200 000. The country's economy depends largely on agriculture and fishing. Agriculture predominates since it accounts for 54% of the GDP, occupies 85% of the active population and represents 93% of exports. Main crops produced are rice and cashew nut. However, agriculture faces several constraints, especially the poor road condition, lack of technical assistance to ensure considerable productivity gains and inadequate supply of goods essential for conducting activities in the sector. The poor sectoral performance is at the origin of some of the major difficulties facing the country. Indeed, food produce import accounts for 32% of total import cost. Yet, with an annual potential of 300 000 tonnes, the fishing sector has the highest and most immediate potential which has so far not been tapped due to an environment inconducive to private sector development and the inadequate institutional capacity.

1.1.2 In view of the said potential, the Government decided to make agriculture the fulcrum of the country's economic development. Thus, it requested the Bank Group to fund the master plan study to determine ways to develop fishing. The study resulted in the preparation of a development programme comprising the following actions: (i) encouragement of national investors by putting a favourable sectoral investment code in place; (ii) fishery resource management, monitoring and surveillance; and (iii) human resource training to meet government and private sector needs. The programme emanating from the study was presented to donors in January 1997 during a government-sponsored workshop. In the wake of the workshop, the Bank decided to participate in implementing the project by emphasizing: (i) improvement of the institutional environment; (ii) setting up landing infrastructure; (iii) fishery resource management and coastal maritime surveillance; and (iv) training. The Bank Group dispatched two missions in March 1998 and January 2001 to appraise the project (the second was an update mission following the suspension of loans to Guinea-Bissau as a result of the war and sanctions). This appraisal report draws from both missions and is based on the Bank-funded study, field data and information that the mission obtained. The project proposed is in sync with Bank Group strategy in Guinea-Bissau. Although most donors are interested in the programme, they await the project outcome to provide additional support to the sector.

2. **THE FISHERIES SECTOR**

2.1 **Background**

2.1.1 Although its coastline is limited (275 km), Guinea-Bissau's continental shelf is among the largest on the West African coast (50 000 km²). The coast is indented by river mouths, bordered with mangroves and extended by an archipelago of more than 30 islands to Bissau's East and South-West. Foreign vessels conduct industrial fishing under licence, mostly on high market value species. National industrial fishing is barely developed, semi-industrial fishing is limited to a China-funded project which operates two vessels and one cold facility. Artisanal fishing which, until recently, was a subsistence activity has become income-generating thanks to the performance of various fishing projects. Continental fishing remains a marginal activity. Annual fish production is estimated at 85 000 tonnes, including 20 400 tonnes from artisanal fishing, corresponding to 62% of the country's consumption. Fish is the main source of protein, with annual consumption per capita of 26 kg, i.e. 70% of the protein needs.

2.1.2 According to the TAF-funded master plan study, the annual tappable resource level stands at nearly 100 000 tonnes for high market value demersal species and 200 000 tonnes for

pelagic species. The fishing sector plays a key role in the country's economy, contributing 4% of the GDP, providing 43% of the State budget (i.e. nearly US \$ 15 million yearly) and employing 120 000.

2.2 Development Policy

The current development policy is based on the following fundamental objective: maximize the economic and social benefits that the country can draw from the rational exploitation of fishery resources in its exclusive economic zone (EEZ). To attain that objective, the following priorities were defined: (i) increase employment possibilities in the sector; (ii) create an enabling environment for the development of the national catch capacity and the private sector's ability to process and market seafood; (iii) attract foreign aid with which to develop the sector; and (iv) rationally manage the sector in general and fishery resources in particular.

2.3 Constraints to Fisheries Development

Despite considerable effort by the Government of Guinea-Bissau (with the support of development partners), the fishing sector is hampered by major bottlenecks especially with regard to surveillance, resource management and receipt improvement. Fisheries management constraints mostly concern: (i) weak and inadequate fisheries research; (ii) inadequate surveillance; (iii) lack of adequate port, vessel repair and maintenance, fuelling, cold facility infrastructure and services; (iv) the socio-economic environment inconducive to the development of industrial fishing (shortage of managers, dissuasive investment code); and (v) fishing input supply difficulties (mostly due to near-total sectoral dependence on the outside world).

2.4 Sectoral Institutions

2.4.1 The fishing sector comes under the supervision of the Ministry of Agriculture and Fisheries. The operational departments in charge of the sector comprise the General Directorate of Fisheries and autonomous services, including the Investigation and Applied Research Centre (Centre d'investigation et de recherches appliquées, CIPA). The main related department is the Maritime Taxation Centre (FISCMAR).

Investigation and Applied Research Centre

2.4.2 The Investigation and Applied Research Centre (CIPA) evaluates and monitors fishery resources to determine the exploitation level and propose management measures with a view to catch optimization. It was established in 1986 and employs 11 scientists and 4 service staff. Overall, the training level is average. The laboratories are under-equipped, the staff inadequate and unqualified. The Centre has no vehicle, and for outboard operations only has one 8 m motorized dinghy. Computer resources are practically non-existent and available documentation scant. Despite these weaknesses, CIPA conducted an integrated maritime resource management study with CIDA support, contributed to the Buba Sustainable Fisheries Development Project funded by the IUCN and the World Bank, and conducted other studies. CIPA is responsible for supportive research on the ADF-funded Advanced Artisanal Fishing Development Project (PRODEPA).

2.4.3 Based on these considerations, CIPA, outside the ADF Project framework, was unable to design, monitor and use statistics particularly in connection with industrial fishing. Its activity was scattered in various areas except for fishery resource evaluation and follow-up programme (artisanal fishing) funded under the ADF project. The programme which was suspended in June

1998 in the wake of the civil war, resumed in 2001. CIPA will receive institutional support to enable it to successfully conduct its mission.

Maritime Taxation Centre

2.4.4 The Maritime Taxation Centre (Centre Fiscalisation Maritime, FISCMAR) is in charge of coastal surveillance. The Centre has two vessels (one 20 m and two 15 m launches) specially designed for the purpose. The launches are managed by the National Navy. Nearly half of Guinea-Bissau's EEZ (some 30 000 km²) requires sustained monitoring and surveillance. Since the launches are based in Bissau, it is difficult to effectively cover the whole EEZ. Moreover, as soon as a launch sets ready to sail from Bissau, unauthorized fishing vessels receive warning from persons onshore, thus giving them enough time to move away from the country's territorial waters.

2.4.5 CIPA lacks the resources with which to successfully conduct its operations and faces the following constraints: (i) an inefficient monitoring/surveillance structure; (ii) observers and investigating officers who lack the required training level; and (iii) inadequate operating budget for the monitoring/surveillance department. However, FISCMAR is able more or less to provide coastal surveillance. In 1999, 25 vessels were boarded, inspected and fined US \$ 3 million, all of which was paid into the public treasury. Although it is provided that 30% of the fines be given to FISCMAR, it received less than 15%, thus enormously hampering its operations and limiting its actions against illegal fishing. Strengthening of FISCMAR activities implies that it be provided with necessary human resources and logistics: management training, small surveillance launches, radio equipment and surveillance radar. Furthermore, to better the Centre's operations, the public treasury should be constrained to pay to it adequate amounts from fines and part of the resources from fishing licenses.

3. THE SUB-SECTORS

3.1 Industrial Fishing

3.1.1 Industrial fishing is conducted by 145 foreign vessels and 30 Bissau Guinean units, 25 of which are on charter. The officially-declared catch by the above fleet amounted to 34 500 t in 1996, 3 000 t of which landed in Guinea-Bissau. The declared figures are far below the actual catch. The TAF-funded fishing master plan study estimates at nearly 60 000 t the industrial fishing catch, mostly of demersal species. Taking into consideration the demersal species in the EEZ zone set aside for industrial fishing, the annual tappable potential ranges from 50 000 to 60 000 tonnes. In the light of current catch estimates, the stock is very likely over-exploited, the same as the shrimp stock (potential: 2 500 tonnes; exploited: 2 600 tonnes). Industrial fishing is principally conducted by foreign vessels which do business within the framework of fishing agreements. The cost of fishing licenses is negotiated periodically with vessel owners and the European Union (EU), depending on the species caught. In 1997, 202 licenses were issued for US \$ 16 million; half the licenses went to EU countries, the other half to Senegal, Japan and chartered vessels.

3.1.2 From the foregoing, the number of licenses granted is at variance with the resources available. By adding to authorized boats vessels fishing clandestinely, special coastal management and surveillance effort is needed to prevent the exhaustion of the fishery resources in the near future. Moreover, it is worthy to note that the presence of the industrial fleet is hardly of much benefit to the country's economy. Indeed, these boats do not refuel in Guinea-Bissau, nor do they make repairs or land their production in the country (except some frozen fish within the framework of certain fishing agreements) owing to lack of processing industries onshore. The development of

the national production capacity and its processing requires the lifting of existing constraints and improvement of the institutional environment.

3.2 Artisanal Fishing

3.2.1 The number of artisanal fishermen has increased in recent years, from nearly 4 500 in 1989 to 9 800 in 2000. The growth is linked to high immigration of fishermen from the sub-region (27% of the total), youth interest in fishing, conversion of continental fishermen to maritime fishing and the beneficial impact of various fishing projects, including the one that the Bank funded to train and integrate youths into the sector. The artisanal fishing fleet comprises 2 490 vessels including 1 876 simple monoxyclic canoes (24% motorized). The rest of the fleet contains 512 vessels (mostly the Senegalese type), 83% of which are motorized. The catch estimated at nearly 20 400 tonnes is mostly of estuarine species (mullet, *bonga ethmalosa*).

3.2.2 Problems facing artisanal fishermen include: (i) lack of landing facilities, forcing fishermen to land their catch on muddy and unhealthy banks with the possible consequence of disease transmission to fishermen and consumers; (ii) production conservation; and (iii) a lucrative market. High market value demersal resources of the coastal zone (34 000 tonnes) accessible only to artisan fishermen are hardly tapped in the absence of an export market (pursuant to the quality standards imposed by the European Union). The pelagic species accessible to artisanal fishing (110 000 tonnes) which require more resources to tap are hardly exploited for lack of logistics. The constraints that used to hinder the development of artisanal fishing (few fishermen, sales price control, lack of credit and fishing input) is gradually being overcome, thanks to the Government's new economic policy and combined donor efforts.

3.3 Donor Intervention

3.3.1 Several donors undertook operations in the fishing sector to support Government effort, among them the ADF, Cooperation Française, the FAO, Sweden, Portugal, Belgium, Japan, the European Union, the USAID, the Peoples Republic of China, the Republic of China (Taiwan), the IUCN and "Ile de la Paix". All donor-funded projects except that of the ADF and "Ile de la Paix" have been completed or were suspended in the wake of the civil war. The projects had a positive impact on artisanal fishing in terms of training, credit and infrastructure. Thanks to them, artisanal fishing bloomed with the number of artisan fishermen growing from an estimated 2 000 in 1985 to 4 500 in 1989 and nearly 9 500 in 2 000. The fishing system also evolved, moving in under two decades from archaic methods to artisanal fishing with use of more modern canoes (currently almost 500).

3.3.2 Regarding industrial fishing, the results have not measured up to efforts made. All donor-financed projects in the sub-sector failed and have been suspended except for the Chinese semi-industrial fishing project (undergoing privatization) whose only reason for survival is the presence of a cold facility built on the Bandim site. The failure of these projects is attributable to the institutional environment, lack of primary facilities (water, energy, telephone) and State involvement in a sector which should be the exclusive preserve of private operators.

3.3.3 Currently, the European Union is funding the Bandim industrial fishing quay for Euro. 3.5 million, in addition to financing the construction of a surveillance centre at Bubaque and rehabilitating fishery buildings. The Kingdom of Spain is interested in financing a quality control laboratory. Furthermore, it should be noted that CIDA funded a sub-regional cooperation programme (Guinea, Guinea-Bissau, Senegal, Cape Verde, Mauritania) on maritime surveillance

which should be continued. Therefore, the project under consideration complements others since it will strengthen the institutional capacity to better manage and improve landing conditions.

4. **THE PROJECT**

4.1 **Project Design and Rationale**

4.1.1 The project is designed to solve the major constraints identified in the fishing sector. It emanates from the fishing master plan study that the TAF funded which was prepared using the participatory approach (consultation with beneficiaries and donors). It takes into account the recommendations and conclusions of the workshop organized in the wake of the study which saw the participation of sectoral operators and donors. Furthermore, the project was designed in close collaboration with the Government, donors, artisan farmers and the national association of fishing entrepreneurs (ANEP). Contributions from these major players were fielded in the course of meetings held during appraisal missions. The consultative meetings will continue during the implementation phase with sub-sector operators, considered as decision-makers and development actors. Activities billed for promotion within the current project framework (e.g. landing facilities) will be conducted with the participation of operators concerned via consultations and workshops. Furthermore, quay management will be left to the private sector.

4.1.2 The first constraint to overcome concerns maritime fishery resource protection and rational management through support to FISCAR and CIPA. The second constraint affects the sub-sector's upper and lower reaches. Upstream, the project contains plans to build a fishing quay at Bandim equipped with facilities conducive to private sector operation, cold infrastructure, fuel stations, maintenance service, a market for women fish sellers, etc. Such infrastructure will strengthen the achievements of the ongoing advanced artisanal fishing development project (PRODEPA). Indeed, PRODEPA put a line of credit in place in support of artisanal fishing (a community development expert who oversees access to credit, reason for which the project under discussion contains no credit component). The PRODEPA credit component will permit the funding of about one hundred modern fishing units which could use the project facilities. The PRODEPA line of credit will also benefit carpenters and mechanics trained under the PRODEPA project as well as all other sector operators especially women fish sellers who may set up cold facilities, fuel stations, etc. Downstream, the project will aim at improving the institutional environment for private sector development. The project design draws from lessons on previous donor and ADF projects in the course of which production activities were left to the initiative of State structures that were incapable of fulfilling their mission.

4.1.3 The strengthening of technical departments in charge of the sector is also necessary for its development. The project will offer training to administrative managers, improve the quality of professional manpower (fishermen, mechanics) and offer technical assistance to the Ministry of Fishery Resources to enable it to better fulfill its mission. In addition, it will take environmental considerations into account. In that regard, supervisors and extension workers will receive appropriate awareness training on the project's impact on the environment. Lastly, to promote interaction between various players and project management, regular workshops have been scheduled. The first workshop bringing together all the actors will be organized before project start-up, the second during Year 3 and the final on project completion. The project will bear the cost of the workshops. The purpose of holding the workshops is to create the enabling conditions for private participation in the sector by putting in place the institutional and material conditions (infrastructure) conducive to fishing. These actions should enhance the sustainable development of the sector.

4.2 Project Zone and Beneficiaries

4.2.1 Location and Physical Context: the project concerns the country's fishing EEZ. The fishing quay site and onshore infrastructure are located at Bandim, a few kilometres from Bissau. The site covers nearly 4 ha and is already occupied by artisan fishermen with all their fishing gear. There is also a fish retail market, a fishing gear market, naval carpenters and outboard motor mechanics. Under the artisanal and industrial fishing master plan framework, provision has been made to improve the site according to the needs of the two categories of fishermen.

4.2.2 Socio-Economic Context: overall, Guinea-Bissau is among the world's poorest countries with 88% of the population surviving on less than one dollar a day. Eighty-five percent (85%) of the population live in the rural area with agriculture as the main economic activity. Based on previous studies, 80% of the population are unlettered and 68% are women who are very active in the rural area. The civil war (June 1998 – November 1999) further exacerbated poverty. Several school dropouts roam the streets with practically no hope of finding any employment owing to the fact that the private sector practically does not exist. The State is the only employer and is unable to offer employment to all and pay monthly salaries averaging US \$ 1. Given that situation, savings are very marginal, estimated at –4.5% of the GDP in 2001.

4.2.3 Various local, cultural or age-group associations exist, but farmers' cooperatives are still few and relatively poorly organized. These associations elect their representatives who run the routine business of their respective groups and interface with development partners. Overall, their main aim is to organize their production and marketing, and obtain credit for input procurement. Women's cooperatives are also of primordial importance especially in connection with credit and market gardening (among which the Women's Economic Activity Cooperative, AMAE).

4.3 Strategic Context

The project falls in line with the country's macro-economic policy framework which seeks to reduce poverty and improve the people's food status. In the light of the country's economic situation at the end of the civil war and its lack of resources, the fishing sector offers the most immediate development possibility, hence the project's importance. The Government has decided to make the fishing sector a development fulcrum. In accordance with that strategy, the project aims at the rational tapping of the fish stock, strengthening of coastal surveillance, encouragement of local investment and promotion of production export from the country. Production processing will contribute to urban poverty reduction especially among women who will find employment in the processing factories. To enhance such possibilities, emphasis will be laid on improving the environment through investment incentives (e.g. fiscal and credit access measures). Actions planned under the project accord with Bank Group strategy on Guinea-Bissau which underscores poverty reduction.

4.4 Objectives

The sectoral objective of the project is to strengthen food security. The specific objective is to promote fishing nationwide.

4.5 Project Description

4.5.1 The key project achievements include: (i) institution building and refresher training of 201 persons on production and 91 persons on administrative support; (ii) establishment of an enabling

environment for private sector participation in industrial fishing by putting in place an attractive investment code; (iii) establishment of favourable conditions for artisanal and industrial production landing by building a 360 m fishing quay and developing 2 ha for onshore industries, repair workshops, market, etc.; (iv) rational management of fishery resources through supportive research and maritime surveillance with the procurement of 3 surveillance launches, rational stock management; and (v) organization, management and provision of necessary staff and resources for smooth implementation of project activities.

4.5.2 The key project components include:

- A. Institution building;
- B. Maritime monitoring and supervision;
- C. Landing infrastructure strengthening;
- D. Project management.

4.5.3 The TAF and the Government will jointly finance Components A.1, A.2 and technical assistance staff, while the ADF and the Government will fund the other components.

Component A: Institution Building

Component A1: Training

4.5.4 Training will concern production staff, administrative managers and research officers in the Ministry of Fisheries. Regarding production, training will be conducted at Bolama in the artisanal fisheries training centre under Bank financing as well as abroad. At Bolama, training will involve: (i) the organization of four sessions of continuous training over four months for about a hundred fishermen and forty mechanics (boat repair and maintenance); (ii) training of 20 refrigeration technicians (recruited at the secondary graduate level); and (iii) organization of a fishing business management seminar for about fifteen persons from the public and private sector. Concerning production, 20 nine-month scholarships will be awarded in a national maritime training school to fisheries managers to perfect their skills.

4.5.5 Training for staff of the Ministry of Fisheries will be offered abroad to middle management officers recruited after completing secondary school studies: (i) 50 observers and fishing surveillance officers in specialized institutes; (ii) 12 fisheries technologists; (iii) three health inspection officers who will be trained in a model agro-food product analysis laboratory for six months; and (iv) 18 fisheries inspectors for six months in a training centre. Senior managers (bachelors and/or masters degree level) will be awarded: (i) 3 nine-month scholarships in a model agro-food product analysis laboratory for veterinary inspector training; (ii) 5 scholarships for project management training within the Agricultural Management Training for Africa (AMTA) framework; and (iii) 10 scholarships for advanced specialized training (maximum 9 months) for oceanographers, fisheries biologists (stock evaluation) and fisheries economists.

Component A2: Support to the Private Sector

4.5.6 The institutional environment is lacking in incentives that would attract private promoters wanting to invest in the fisheries sector. Therefore, the project will tailor specific incentives for the sector. In that connection, provision has been made to recruit two technical assistance staff (a legal expert in fishing law and taxation and a financial economist) each for a twelve-month period. They will participate in defining an investment code and preparing legal texts (legislative and

regulatory) specific to the fisheries sector, with a view to improving the business environment and promoting investment possibilities. Government's adoption of the investment code shall be one of the loan conditions.

Component A3: Supportive Research

4.5.7 Supportive research will focus on: (i) fishery resource evaluation and follow-up; (ii) project impact on coastal surveillance; (iii) evaluation of project impact on fishing; and (iv) estimate, in terms of income, of project impact on the target population. The research will be undertaken on the basis of an agreement with CIPA. The agreement which shall be submitted to the Bank for prior approval will specifically mention management training at CIPA in fisheries biology, fisheries economy, health inspection and fisheries technology as stated in paragraphs 4.4.3 and 4.5.4 above. Bank approval of the agreement shall be a loan condition.

4.5.8 CIPA will set up a scientific follow-up and resource management system run by a scientific and technical team. CIPA will receive operational support to enable it to provide the Ministry of Fisheries with necessary information to define a development strategy and resources to successfully implement same. The support will involve the establishment of a follow-up and data analysis system; in that regard, the project will recruit a technical assistance staff for 22 months corresponding to two fishing seasons, to assist CIPA in putting in place a fishing data collection and processing system.

Component B: Maritime Monitoring and Surveillance

4.5.9 FISCMAR will implement the above component. To strengthen EEZ surveillance, the project will rehabilitate a 350 m² building at Bissau and equip it with an adequate "operation" room, a radio and telecommunications centre, an office for the premises manager, a secretariat, an information processing office, on-duty rooms, archives and wet rooms. The operation room will have a charts table, a watch console (with HF and VHF radio equipment) and various standing tables, especially cartographic representations of maritime zones under Guinea-Bissau jurisdiction. The Centre will be equipped with an electric generator. The Government shall transfer the premises of the surveillance centre to the project. Proof of the transfer and staff to manage it (a centre manager and three radio technicians) shall be a loan condition.

4.5.10 The project will build two coastal surveillance bases at Cacine and Cacheu (210 m² and 100 m², respectively). Each base will comprise staff quarters (two buildings of 85 m² at Cacine and one building of 60 m² at Cacheu which already has accommodation facilities) and a radio room. Each communications room will have a charts table, a watch console (with HF/VHF radio and radar equipment) as well as various standing tables with cartographic representations of the EEZ. The project will acquire 3 maritime radio-equipped surveillance vessels. As planned, 30% of boarding and inspection taxes will be paid to the Surveillance Centre for its operation. Since strengthening of maritime surveillance will contribute to reducing unauthorized fishing (hence boarding and inspection taxes), the project will ensure that vessel operating charges and the cost of running the Surveillance Centre are funded with income from fishing licenses. Payment to FISCMAR of part of the boarding and inspection taxes as well as fishing licensing income shall be a loan condition. Putting of FISCMAR premises in Bissau, Cacine and Cacheu at the project's disposal will also be a loan condition.

Component C: Strengthening of Landing Infrastructure

4.5.11 To enhance landing and processing, the project will set up infrastructure comprising the construction of a 20 000 m² platform and a landing quay at Bandim, a few kilometres to the south-west of Bissau. The Bissau city master plan provides for the construction of a fishing port in that locality. Therefore, the project operation will complement the transshipment quay for 25 m boats, construction of which is planned with EU financing. The quay will measure 360 linear metres (lm) and permit descent to anchor via stairways. In addition to the quay, other operations will include: (i) rehabilitation of 30 linear metres of existing quay in lateritic stone masonry; (ii) a slipway with a 50 lm ramp to haul vessels for repairs; (iii) dredging; (iv) platform drainage; (v) water supply and electrification with two stand-by generators; (vi) fence construction; and (vii) construction of port administrative buildings, fresh fish market and a net-mending shed.

4.5.12 The reason for building the quay will be to facilitate the landing of artisanal production. The platform will permit private operators who may obtain PRODEPA line of credit to set up business, a ship repair and construction yard, conservation and processing factories. Management of the quay will be leased to a private company. The technical assistance staff will prepare the lease book of specifications.

Component D: Project Management

4.5.13 The General Directorate of Fisheries will implement the project, with its director as project manager. Since the director's routine tasks may prevent him from monitoring project activities daily, he will be assisted by a principal technical assistance staff who will be recruited for a 24-month period to coordinate project activities. Other staff will include two Guinean managers (fisheries economist and biologist), an accountant, an administrative assistant, a secretary and two drivers. The assignment of two managers whose curricula vitae the Bank shall approve beforehand shall be a loan condition. The project will be provided with equipment (furniture, computer hardware, vehicles); a consultative workshop with women and various sectoral players will be organized in Years 1, 3 and 4 of the project. The project manager and all national staff will be paid job-related benefits. The Government will be responsible for renting and maintaining the project office. Making the office available shall be a loan condition.

4.6 Production, Markets and Prices

4.6.1 **Production:** currently 200 canoes use the landing points in Bissau. These canoes land an estimated artisanal production of 5 400 tonnes yearly. Although the project will finance no production-related activities, it will contribute to increasing artisanal production by landing an additional 4 050 tonnes by project completion. The additional production will result from the fishing efforts of 250 youths which the ADF-funded artisanal fishing development project will train. It is hoped that at least 100 of such youths set up business thanks to credit that the said project will provide. In terms of income, the additional production amounts to an equivalent of FCFA 3.04 billion over the project period.

4.6.2 **Markets:** women traders or fish wholesalers (called "bideira") dominate the fisheries product markets throughout the sub-sector. The fish wholesalers buy directly from producers to sell to retail traders from whom consumers buy. The market trend is characterized by a constant increase in consumption in Bissau and localities in the country's interior. The low purchasing power of most consumers is a growth level determining factor. Fish is consumed fresh and dried, but with preference for fresh fish. Current fish consumption level per capita varies considerably by town or region, and is far lower in the rural area due to transport difficulties.

4.6.3 Guinea-Bissau's fish market is far from saturated since artisanal production only covers 62% of the country's consumption. Furthermore, improvement in the landing sanitary conditions will grant access to the sub-region's market in general and the European market in particular (the latter being a luxury market very open to fresh supplies for species such as those produced by fishermen trained within the PRODEPA framework). The market is easily accessible since air links are regular, more so because it only requires low quantities acceptable as air freight. This is an up-market where artisan fishermen will easily find a niche.

4.6.4 **Price:** fresh fish is marketed at a producer price of FCFA 700 to 800/kg, depending on the quality. The average price of FCFA 750 was used as the basis for the financial and economic analysis. Retail fish price in Bissau ranges between FCFA 1 000 and 1 200, but falls significantly in rural areas. Frozen fish is sold through a State circuit at a fixed price of FCFA 750/kg. Sales are often made directly to civil servants or via women sellers who buy from projects. In contrast, smoked fish is sold at between FCFA 1 500 and 1 700/kg.

4.6.5 State participation in marketing frozen fish is mostly motivated by the desire to make the product available to the poorest, notwithstanding their purchasing power. Unfortunately, frozen fish is exclusively sold in Bissau owing to transport difficulties. The armed conflict that erupted in June 1998 interrupted the State's divestiture from productive activities initiated under the public enterprise privatization programme. The privatization programme was relaunched with World Bank assistance.

4.7 Environmental Impact

4.7.1 The project has been classified in environmental category II. Positive impacts will include more jobs, artisanal fishing promotion, access to credit, better nutrition and living conditions. Surveillance of the EEZ will help limit illegal fishing activities and promote long-term management of stocks. The construction of a quay will help put an end to the practice of off-loading catches onto unhealthy areas. Instead, they will be directed to the quay where landing conditions will have been improved under the project.

4.7.2 The infrastructure to be built could cause negative impacts at the construction phase. Effects from the construction of the landing stage, fishing quay and buildings on the site and the health of workers could be easily mitigated. Negative impacts from the project's operational phase include over-fishing and the effects thereof on the marine ecosystem of the Guinea-Bissau EEZ. Fish scraps from processing activities, and accumulating refuse pollute the coast. These effects will be kept under control by regular surveillance of the stock, environmental sensitisation campaigns and installation of appropriate refuse bins on the activity areas.

4.7.3 A better surveillance of the coast and EEZ as well as rigorous management of fishing licences with the backing of CIPA will help limit over-fishing. Under the project, funds will be provided for the construction of two coastal surveillance bases. They will be equipped with marine surveillance boats fitted with a communication radio. Industrial fishing boats will be prohibited from fishing within a six-mile radius so as to protect the reproduction areas. An observer will board each boat with the purpose of controlling mesh size and avoiding young fish from being caught. The smoking areas cut out and more effective improved stoves ("Chorkor") will limit to a great extent the amount of wood used in smoking fish and thus stem deforestation. Sensitization campaigns will be organised to prevent pollution from residual oils and hydrocarbon, and favour the collection and removal of solid waste.

4.7.4 Trawler activity will be controlled and nursery areas near the coast protected, in the context of long term stock fishing. The specifications of the construction firms and fishing port management company respectively will contain environmental provisions. Topics relative to environmental protection will be part of the training curriculum. The research programme will help fix the maximum catch by category (demersal, pelagic) and the mesh size required for the survival of the species. The various measures planned to mitigate possible negative impacts are given in Annex 6.

4.7.5 Practices compatible with environmental protection will accompany all project activities. Most of the negative impacts identified will be attenuated with measures recommended not only for environmental protection but also for the sustainability of project actions. The project will be implemented to enable regularly monitoring of environmental and social aspects. These measures will be backed by a sensitisation/training campaign and socio-economic surveys to determine the degree of involvement of fishermen in the project approach. In collaboration with the appropriate departments, the project unit will establish a process for monitoring environmental and social impacts stemming from project activities and suggest if need be, the appropriate preventive, corrective and compensatory measures. The participatory approach will be used for greater involvement of the beneficiary communities and local NGOs. The company in charge of managing the fish port and ancillary facilities will ensure that users are made sufficiently aware of the possible negative impacts of their activities on the environment.

4.8 Social Impact

4.8.1 The expected effects include among others, more jobs, better nutrition and living conditions. After the building of the Bandim Quay facilities there will be a greater supply of fish and other sea products in Guinea-Bissau. The construction of the fish dock and market will increase the country's production, which in turn will mean more jobs in the fields of preservation and marketing where women are very active. The project will help improve their working conditions and reduce their unemployment rate. Since statistics on fishing, particularly the role of women in the sector are rare, provision has been made under the research component, to assess project impact on women.

4.8.2 The start of works on the fish quay site will mean the creation of about one hundred jobs. Coastal surveillance will in time lead to more resources and thereby to the development of fishing especially among the youths. Thus, the training programme which involves over 250 youths will enable their integration directly into the job market at the end of their training. The project will revive the sector, creating many direct and indirect jobs and reducing unemployment. The project will contribute to the creation of 2500 jobs and will have a positive impact on the people's standard of living and the attendant domino effect on poverty reduction.

4.9 Project Cost Estimates

4.9.1 Total project cost, net of taxes and customs duties, is estimated at CFAF 6085 million or 6.68 million Units of Account (UA) including CFAF 4779.63 million in foreign exchange and CFAF 1305.37 million in local currency. The foreign exchange portion represents 79% of total project cost. Tables 4.1 and 4.2 give the project cost breakdown by component and expenditure category.

Table 4.1 Summary of Project Cost Estimate by Component

COMPONENTS	CFAF MILLION			UA MILLION			
	F.E.	L.C.	TOT	F.E.	L.C.	TOT	% F.E.
A. Institutional Support	1437.95	287.63	1725.61	1.57	0.31	1.88	84
B. Maritime Monitoring and Surveillance	1182.07	252.92	1434.99	1.29	0.28	1.57	82
C. Infrastructure Strengthening	1456.99	327.30	1784.29	1.59	0.36	1.95	82
D. Project Management	228.92	264.44	493.36	0.25	0.29	0.54	46
BASE COST	4305.93	1113.97	5419.90	4.70	1.22	5.92	79
Physical Contingencies	211.98	37.38	249.36	0.23	0.04	0.27	85
Price Escalation	261.72	135.70	397.42	0.29	0.14	0.43	67
TOTAL	4779.63	1305.37	6085.00	5.22	1.42	6.64	79

Table 4.2 Summary of Project Cost Estimate by Category

CATEGORIES	CFAF MILLION			UA MILLION			% F.E.
	F.E.	L.C.	TOT	F.E.	L.C.	Tot	
Equipment	283.12	17.31	300.43	0.31	0.02	0.33	94
Transport equipment	262.80	-	262.80	0.29	-	0.29	100
Constructions and earthworks.	1411.66	356.52	1768.18	1.54	0.39	1.93	80
Technical Assistance	839.20	-	839.20	0.92	-	0.92	100
Training	536.75	168.32	705.07	0.59	0.18	0.77	79
Consultants	248.90	0.00	248.90	0.29	0.00	0.29	100
Local staff	-	104.64	104.64	-	0.11	0.11	0
Operating	723.50	485.54	1209.04	0.79	0.53	1.32	60
BASE COST	4305.93	1113.97	5419.90	4.70	1.22	5.92	77
Physical contingencies	211.98	37.38	249.36	0.23	0.04	0.27	85
Price escalation	261.72	135.70	397.42	0.29	0.14	0.43	67
TOTAL	4779.63	1305.37	6085.00	5.22	1.42	6.64	79

4.9.2 Cost estimates are based on prices in force in January 2001. These prices were collected from the administration and commercial firms in Bissau, and from neighbouring countries especially Senegal. An average rate of 10% for physical contingencies was applied to all construction and equipment components. The provision for physical contingencies is CFAF 249.36 million or UA 0.23 million. Average rates of 2.5% were taken into account for price escalation on local currency expenses. The total amount corresponding to this provision is CFAF 397.42 million or UA 0.43 million. In all, the package earmarked for physical contingencies and price escalation represents 10.6% of total project cost or UA 0.70 million.

4.10 Sources of Finance and Expenditure Schedule

4.10.1 The project will be financed jointly by the ADF, TAF and the Government of Guinea-Bissau as indicated in Tables 4.3a, 4.3b and 4.3c below. The ADF contribution of UA 4.29 million represents 88% of the total cost of project components financed jointly by the ADF and the Government and covers 100% of the foreign exchange cost or UA 3.62 million. ADF's share in the local currency costs represents 14% of total project cost.

Table 4.3a Sources of Finance

SOURCE	CFAF MILLION			UA MILLION			%TOTAL
	F.E.	L.C.	TOTAL	F.E.	L.C.	TOTAL	
ADF	3316.17	615.37	3931.55	3.62	0.67	4.29	65
TAF	1463.45	94.82	1558.27	1.60	0.10	1.70	25
GVT	-	576.90	576.90	-	0.63	0.63	10
TOTAL	4779.63	1287.05	6066.68	5.22	1.40	6.62	100

Table 4.3b: ADF/Government Financing

<u>SOURCE</u>	CFAF MILLION			UA MILLION			<u>%TOT</u>
	<u>F.E.</u>	<u>L.C.</u>	<u>TOTAL</u>	<u>F.E.</u>	<u>L.C.</u>	<u>TOTAL</u>	
ADF	3316.17	1124.62	4440.79	3.62	0.67	4.29	88
GVT	-	509.25	509.25	-	0.56	0.56	12
TOTAL	3316.17	1124.62	4440.79	3.62	1.23	4.85	100

4.10.2 The TAF contribution of UA 1.7 million represents 95% of the total cost of sub-components "Technical Assistance" and "Training" financed jointly with the Government and covers 100% of the foreign exchange costs or UA 1.60 million. TAF's share in the local currency cost is UA 0.10 million or 6% of the total of TAF's contribution and that of the Government.

Table 4.3c: TAF Financing/Government

<u>SOURCE</u>	CFAF MILLION			UA MILLION			<u>%TOT</u>
	<u>F.E.</u>	<u>L.C.</u>	<u>TOTAL</u>	<u>F.E.</u>	<u>L.C.</u>	<u>TOTAL</u>	
TAF	1463.45	94.82	1558.27	1.60	0.10	1.70	95
GOVT	-	85.97	85.97	-	0.09	0.09	5
TOTAL	1463.45	113.14	1644.24	1.60	0.19	1.79	100

Expenditure Schedule

4.10.3 All project expenses by component and source of finance will comply with the expenditure schedules indicated in Tables 4.4, 4.5d, 4.5e and 4.5f below.

Table 4.4
Expenditure Schedule by Component and by Year
(UA million)

<u>Components</u>	2001	2002	2003	2004	Total
A Institutional Support	0.19	1.21	0.60	0.00	1.98
B Maritime Monitoring and Surveillance	0.25	0.87	0.31	0.32	1.75
C Infrastructure Strengthening	0.20	1.23	0.86	0.00	2.29
D Project Management	0.20	0.11	0.16	0.13	0.60
TOTAL	0.84	3.42	1.93	0.45	6.64

Table 4.5d
Expenditure Schedule by Source of Finance
(UA million)

<u>Source</u>	2001	2002	2003	2004	Total
ADF	0.62	2.10	1.22	0.35	4.29
TAF	0.10	1.09	0.51	0.00	1.70
Government	0.12	0.23	0.20	0.10	0.65
TOTAL	0.84	3.42	1.93	0.45	6.64

Table 4.5e
ADF/Government Expenditure Schedule
(UA million)

<u>Source</u>	2001	2002	2003	2004	Total
ADF	0.62	2.10	1.22	0.35	4.29
Government	0.09	0.19	0.17	0.10	0.56
TOTAL	0.72	2.29	1.39	0.45	6.62

Table 4.5f
TAF/Government Expenditure Schedule
(UA million)

<u>Source</u>	2001	2002	2003	2004	Total
TAF	0.10	1.09	0.51	0.00	1.70
Government	0.03	0.04	0.02	0.00	0.09
TOTAL	0.13	1.13	0.53	0.00	1.79

4.10.4 The ADF's share in the local currency cost is justified for the following reasons:

- i) Guinea-Bissau's economy has been undergoing structural adjustment since the early 1990s. This adjustment has been positive overall. The growth rate improved, and internal and external deficits were brought gradually under control. Guinea-Bissau's integration into UEMOA on 2nd May 1997, should contribute to monetary stability, promote regional integration and investments. However, the military conflict called to question these achievements. Real GDP fell from 28% in 1998 against a growth rate of 4.8% in 1997. Most activities were brought to a halt. The overall budget deficit (commitment basis, excluding grants) representing 17.8% of the GDP in 1997 settled at 19.4% in 1998. The current account deficit (excluding official transfers other than fishing licences) rose from 17.7% of the GDP in 1997 to 19.9% in 1998. 1999 and 2000 were marked by a relative improvement in the country's economic situation. Post war, in 1999, GDP growth was 7.8% reaching 9.3% in 2000 and 8.3% in 2001. The balance of payments deficit (excluding transfers other than fishing licences) was 14.4% of the GDP in 1999, to reach 17.9% in 2000 and 22.7% in 2001 as a result of the economic recovery in all activity sectors. Inflation moved from -2.1% in 1999 to 9.1% in 2000 and 2.2% in 2001 mainly because of the increase in supply, particularly of food products.
- ii) The Government's new strategy aims at reducing poverty, fostering good governance, strengthening core infrastructure, pursuing structural reforms, improving management of the administration and promoting agriculture, fisheries and the private sector.
- iii) Given financial restraints and international commitments, the country cannot be allowed concessional resources that the local financial markets offer. ADF's contribution to the project's local currency cost will be needed for the local currency percentage for construction, furniture bought locally, training seminars, local staff salaries and operating of the project management team. The national contribution to the project was reduced to the strict minimum and concentrated primarily on the cost of premises that the Government will put at the project's disposal and on indispensable expenses to ensure continuity of activities and infrastructure after the

project, such as project-related operating costs, salaries, infrastructure maintenance and maritime surveillance bases.

5. PROJECT IMPLEMENTATION

5.1 Executing Agency

The Borrower will be the Republic of Guinea-Bissau and the executing agency the General Fisheries Directorate whose director will be the project manager. Routine management of the project will be the responsibility of the principal technical assistant who is expected to have a very good experience in managing fisheries projects, and two national counterparts one a fisheries biologist and the other a fisheries economist. The project support staff will comprise an administrative assistant, an accountant, a secretary and two drivers.

5.2 Institutional Arrangements

5.2.1 Components requiring special skill will be implemented through an agreement with the following structures:

- FISCMAR for maritime coastal surveillance;
- CIPA for supportive research.

5.2.2 The project unit will carry out components concerning the fishing quay construction. It will prepare specifications relative to terms for the management of the quay, take charge of training programme and provide the private sector with support. It will also be required to coordinate, inspect and monitor all project activities, prepare the activity programme and annual budgets, prepare bidding documents and disbursement requests, prepare financial statements, annual/quarterly reports as well as monitor agreements with CIPA and FISCMAR. Management of the fisheries quay will be entrusted to a private company which will ensure its smooth running.

Project Steering Committee

5.2.3 Coordination, monitoring and directing of project activities will be the responsibility of the Project Steering Committee. The latter will comprise representatives of the Ministries of Economy and Finance, Natural Resources and the Environment, the General Fisheries Directorate, CIPA, FISCMAR, members of the project management team, two representatives of the artisanal fishermen and two of the private sector. The Committee will meet at least three times a year or each time the need arises, under the chairmanship of the Ministry of Fisheries or his representative, and will be required to: review and approve the physical and financial reports of project activities; approve the programme of activities and annual budgets; and coordinate project activities with the other actors in the sector. Establishment of the Steering Committee will be a loan condition.

5.3 Supervision and Implementation Schedules

The project will be implemented in 4 years starting February 2002 and will be completed in February 2006; the implementation schedule is shown in Annex 3 of this report. Plans have been made for two supervision missions a year and three workshops, one at project start-up, another in year 3 and the third at the end of the project.

Table 5.1: Implementation Schedule

Activities/ Actions	Initiators	Start-up	Duration
Board approval	ADF	May 2001	5 days
Signature of loan agreement	GVT/ADF	July 2001	
General procurement notice	MAP/ADF	August 2001	
Effectiveness of loan and first disbursement	MAP	February 2002	
Establishment of the PU, staff secondment and recruitment	MAP/ADF	October 2001	3 months
Recruitment of the project manager and TA staff	MAP/ADF	October 2001	6 months
Recruitment of the consulting firm for engineering designs	MAP/ADF	October 2001	6 months
Preparation of the first annual programme	MAP	February 2002	
Project launching workshop	MAP	February 2002	
Preparation of engineering designs for civil works	PU	April 2002	3 months
Conduct of studies for investment code	PU	May 2002	18 months
Signature of agreements with CIPA and FISCAR	PU	July 2002	
Competition for civil works	PU	August 2002	4 months
Civil works	PU	November 2002	12 months
Planning workshop: establishment of the logical operational framework, the overall operation plan and the operation plan for the first year.	PU	February 2003	1 week
Training	PU	July 2002	4 years
Audit of accounts	PU/consult.	April 2003	3 years
Final evaluation and workshop	PU/consult.	February 2006	8 days

5.4 Procurement Arrangements

5.4.1 Arrangements relative to procurement are summarised in the table below. All goods, works and services financed by the Bank will be procured in compliance with Bank rules of procedure for the procurement of goods and works or as the case may be, with the rules of procedure for the use of consultants, using the relevant Bank standard bidding documents.

Table 5.2: Procurement of Goods and Services
(in UA million)

	IC	NA	SL	Other *	<u>Total</u>
1. Civil works					
1.1 Infrast. fishing quay	2.08				2.08[1.94]
1.2 Surveillance Centre buildings		0.18			0.18[0.16]
2 Goods					
2.1 Vehicles and launches	0.33				0.33[0.33]
2.2 Equipment	0.37				0.37[0.35]
3. Services					
3.1 Technical assistance			0.96		0.96[0.96]
3.2 Audit and midterm review			0.10		0.10[0.10]
3.3 Inspection and supervision infrast. fishing quay			0.19		0.19[0.19]
3.4 Inspection and supervision surveillance bases			0.01		0.01[0.01]
4. Training				0.81	0.81[0.74]
5. Other expenses					
5.1 Local staff salaries				0.13	0.13[0.09]
5.2 Operating cost				1.46	1.46[1.10]
Total	2.78	0.18	1.26	2.40	6.64[5.99]

Note: figures in brackets indicate the amounts to be financed by the ADF.

5.4.2 National rules and regulations governing contracts with the Republic of Guinea-Bissau were examined and judged acceptable.

5.4.3 The resources, capacity, expertise and experience of the General Fisheries Directorate are inadequate for project procurement and implementation. Therefore, it is indispensable to recruit technical assistants including a procurement specialist for the project's efficiency. Under the procurement arrangements, a provision of UA 0.96 million has been earmarked for these services. Technical assistants will be recruited from consulting firms on the basis of a short list after pre-qualification, in compliance with Bank rules of procedure for the use of consultants. Consultancy services for audit, midterm review, inspection and supervision of the fish quay facilities and fishing surveillance centres for a value of UA 300 000 will also be procured on the basis of a short list. Procurement will comply with the following procedures:

Civil Works

- Civil works for the construction of fish quay facilities (quay and buildings) for a value of UA 2.27 million will be procured through international competition;
- Building construction works on the surveillance centres and overhaul of the FISCMAR headquarters for a value of UA 180 000 will be procured through national competition because of the low amount of the contracts (maximum of UA 50 000 per contract).

Goods

- The contract for the supply of speed boats and vehicles of a value of UA 330 000 will be awarded through international competition;
- The contract for equipment worth UA 370 000 will also be awarded through international competition;
- Contracts for the award of goods such as office equipment and consumables available locally and which will be purchased from the revolving fund will be awarded through national shopping because of the low amounts involved (maximum of UA 10 000 per contract). These contracts come under the «operating cost» item of Table 5.1.

Training

- Training abroad and in Guinea-Bissau will cost an estimated UA 810.000. The procedure of competition based on a short list will be used for training abroad. Since each local training course should last not more than 4 weeks, the trainers or individual experts will be recruited on the basis of negotiated contracts in compliance with rules of procedure for the use of consultants.

General Information Notice on Procurement

- The text of the general information notice on procurement will be prepared and presented for adoption by the Borrower during loan negotiations. The text adopted will be issued for publication in "Development Business" upon approval of the project by the ADF Board of Directors.

Review Procedures

The following documents will be submitted for review and approval by the Bank prior to publication:

- special information note on procurement;
- bidding documents or letters of invitation to consultants;
- bid evaluation reports comprising recommendations on contract award;
- draft contracts if those included in the bidding documents have been modified.

5.5 Disbursement Arrangements

Project funds will be disbursed on the basis of an annual programme previously approved by the Government and the ADB. Requests for disbursement from the revolving fund should cover a period of four (4) months and submitted to the ADB for approval. Disbursement of the subsequent revolving fund will be subject to justification of the previous one. Other project-related disbursement will comply with procedures in force. The Bank will monitor the project through supervision missions and periodic reports to be sent by the project management team, especially quarterly and annual progress reports, provisional budgets and annual project activity reports. Conclusions and recommendations resulting from these missions will be sent to the project executing agency so that measures will be taken accordingly.

5.6 Monitoring and Evaluation

5.6.1 Physical achievements of all project components will be monitored and evaluated daily by the engineering and planning firm and the Ministry of Fisheries. A midterm review has been scheduled for the second year of the project. The project team will prepare and submit to the Bank, quarterly and annual activity reports on all project activities. These reports should be prepared in compliance with Bank guidelines. External monitoring of project activities will be the responsibility of the General Planning Directorate which will hold quarterly meetings to inform beneficiaries of progress and seek their opinion. Records of these meetings will be included in the quarterly reports sent to the Bank.

5.6.2 The project management team will have an accounting system for the entire project. A special account for funds will be opened in a commercial bank in Guinea-Bissau. The team will also keep separate accounting books where all project-related expenditures will be recorded. Accounts will be audited annually by an independent auditor and the related reports sent regularly to the Bank for review.

5.7 Financial and Audit Reports

Project accounts will be kept in books that show clearly all ADF-financed operations and subject to control by public institutions. An external audit firm financed by the Bank will be recruited for verification of project and related bank accounts once a year.

5.8 Aid Coordination

The appraisal mission had meetings with donors involved in the fishing sector (FAO, French and Portuguese Embassies, UNDP, European Union); it explained the basic strategy that underlies the project. The latter aims to put in place core infrastructure and improve the business environment to promote long term investment in the sector. All the donors have the same view on the actions to undertake towards the sector's development. They all feel that sustainable development of Guinea-Bissau's fishing sector implies improving the institutional framework, and that the project was designed at the right moment. During implementation the project authorities will have periodic discussions with donors through consultations and workshops that will be organised for actors involved in the sector.

6. **PROJECT SUSTAINABILITY AND RISKS**

6.1 Recurrent Expenditure

6.1.1 The project executing agency is not expected to carry out the operations planned. Its role is to set out the frameworks of action in which the scheduled operations will be carried out by the technical departments of the Ministry of Fisheries and the private structures that will be selected for the conduct of some project components. These components will be implemented through an agreement and contract approved by the Bank. One of the main tasks of the executing agency is to monitor these agreements and contracts. The project structure will therefore be very light, its staff will comprise a technical assistant and Guinea-Bissau officers whose term of office will end on completion of the project.

6.1.2 The project's recurrent expenses can be summarised as operating expenses of the three support bases and the National Centre for Taxation and Maritime Surveillance. The cost of running the surveillance bases will be covered by revenues from boarding and inspection charges and fishing licenses.

6.2 Sustainability

6.2.1 The project was designed using the participatory approach and takes into account sector constraints, beneficiary preoccupations and the opinions and suggestions of development partners. It aims at creating the conditions propitious to greater private involvement in the fishing sector by unveiling core infrastructure and training professionals of the private sector and administration. These actions are intended to lay the groundwork for the sector's long term development. The facilities planned are easy to manage and do not require a regular expenditure entry in the state budget. The quay will be leased to a promoter for maintenance. The other installations will be implemented by private operators, the project will facilitate their installation. In addition, using the participatory approach soon after project start-up will favour greater involvement in its achievements. Moreover, the training given will also contribute to the sustainability of the facilities.

6.3 Major Risks and Mitigating Measures

The project is based on the assumption that private promoters have decided to invest in the fishing sector and consequently, a good fraction of the fishery resources will land and be processed in Bissau. On that assumption, there is a risk that private promoters will refuse to invest in the sector. This is mitigated by the fact that the project intends to promote the sector by improving the institutional environment so that it is more attractive to private operators. The related investment code will be set out after consultation and collaboration between sector actors (national and foreign) and the Government. Since the Guinea-Bissau authorities are bent on making the fishing sector one of the country's development poles, they will do their utmost to attract investors interested in the sector.

7. **PROJECT BENEFITS**

7.1 Financial Analysis

7.1.1 The project's financial analysis is based on the running of the quay, the fresh fish market and stores to be built under the project. It takes into account revenues from fees paid by fishermen, fish wholesalers, store rental and charges that include the quay investment cost, staff and operating expenses. The quay will be built to receive 50 12-metre canoes per day. The financial analysis therefore covers a period of 20 years. The other assumptions that subtend the analysis are summarised in Table 1 of Annex 4.

7.1.2 An overall analysis of the financial situation of the quay, market and stores as of the second year reveals a net positive income, after deduction of all charges. The net current income amounts to about CFAF 1.515 billion with an internal rate of return estimated at 24.70%, if the opportunity cost of capital is set at 12% (Annex 5). This result is perfectly satisfactory and an investment of this type is financially profitable. In addition, an analysis of the operating income of a canoe shows rather high income levels, of between CFAF 20.25 million and CFAF 22.50 million a year depending on the fishing efforts made, resulting in appealing net profit of between CFAF

2.5 and 4.7 million a year, following deduction of all charges. These results are altogether satisfactory because they are based on rather conservative estimates.

7.1.3 This financial situation is quite attractive for a private operator who normally does not bear the initial investment cost or the quay's maintenance expenses. In addition, the economic operator who will manage the quay could build the land facilities such as the petrol station, ice production unit, storehouse, etc so as to boost returns on the quay.

7.2 Economic Analysis

7.2.1 The economic analysis is based on an overall assessment of the direct economic benefits of the three income-generating centres. These include in particular (i) the maritime control surveillance centre; (ii) the quay; (iii) the fresh fish market and its repairs and naval construction workshops. No funds have been earmarked under the project for production or credit. In the pre-project situation, the catch is landed anywhere in unhygienic conditions, and there are no industries or related services. Post-project, catches will land in healthier conditions and fishery resources will be better managed. The project's economic analysis is based on the following assumptions:

- Analysis conducted over a 10 year period;
- 200 days of effective fishing per annum;
- output: 150 k/day or 30 tonnes of fish a year;
- there are 200 canoes in Bissau; this number will increase by 50 a year starting year 3 of the project;
- 50 landings per canoe per annum;
- current price of landing per canoe is CFAF 1000;
- price of landed fish is set at CFAF 750 /kg starting year 3 of the project in anticipation of the increase in the incomes of civil servants and improvement in the quality of fish;
- Construction of the quay: assistance in equipping the country (public property) and considered for half its value;
- Equipment and operating costs (fuel and lubricant) taken for three quarters (3/4) of their value to reflect indirect custom duties and taxes; cost for research, technical assistance, training are excluded from the analyses as their immediate profit is difficult to quantify. Expenses relative to physical contingencies and price escalation are not taken into account in the analysis;

7.2.3 Based on these assumptions and considering operating expenses and income generated by these project activity centres, the internal economic rate of return (IERR) is evaluated at 19% (Annex 4, Table 2) when the capital economic cost is fixed at 12%. This performance is judged satisfactory because the project's indirect benefits such as training, supportive research, etc. impossible to put a figure on are not taken into account. In addition, this is not a development but rather a fishing sector support project whose ultimate objective is to improve conditions conducive to private sector involvement.

7.3 Social Impact Analysis

7.3.1 Actions scheduled under the project will help improve the socio-economic environment of Guinea-Bissau's fishing sector for long term investment. Strengthening the services of the National Taxation and Maritime Surveillance Centre will enable the country to protect and rationally manage its available fishery resources. Similarly, the various training sessions planned

under the project will help improve performance of staff in the Administration responsible for the sector, develop the business capacity of seafaring fishermen and specialized workers, thereby enabling the creation of private income-generating activities and the reduction of poverty.

7.3.2 In the short term, with the opening of infrastructure construction sites numerous jobs will be created and the current unemployment rate will fall. In the long term, the quay infrastructure and ripple effects will mean the creation of about 2500 new jobs for fishermen, fish workers and mongers, thanks to the positive reaction of both national and foreign economic operators who will invest in services related to the Bandim Port installations. In addition, the financial and economic analysis shows that artisanal fishing activities are viable. Consequently, the project will contribute to boosting food security and reducing poverty which is impossible in the pre-project situation.

7.3.3 By creating jobs and distributing incomes the project will have a positive impact on the life of the people, women in particular who are very active in marketing fish and on poverty reduction. Although the percentage of women involved in the fishing sector is not known, the project will ensure that at least 10% of these women take part in the training sessions planned for the beneficiaries. The training of fishing skippers and workers specialized in refrigeration and naval repairs will give renewed impetus to private initiatives in the drive to reduce poverty. In addition, project activities will lead to a higher purchasing power. Investment expenses at project implementation phase will be used to pay workers and purchase goods from contractors thus contributing to a distribution of income among actors.

7.4 Sensitivity Analysis

The sensitivity analysis shows that a drop of 20% in the price of fish raises the IERR from 19% to 14% when the rate of opportunity capital cost is fixed at 12% per annum. The landing price has a major effect on the rate of return because the market user charges for fishermen are paid on the basis of the quantity of fish sold. If charges are increased by 10%, the ERR reaches 12% whereas a drop in earnings causes the ERR to fall from 19% to about 11%; this indicates that a 10% increase in charges or a 10% drop in earnings has virtually the same effect and the ERR becomes very sensitive.

<u>Assumptions</u>	<u>ERR (%)</u>
Basic	19%
20% drop in the price of fish	14%
10% increase in charges	12%
10% drop in earnings	11%

8. **CONCLUSIONS AND RECOMMENDATIONS**

8.1 Conclusions

8.1.1 Guinea-Bissau boasts major fishery resources not yet tapped by the national fishing fleet because of sector constraints. Post-war, the country gave priority to the development of fishing with the purpose of diversifying financial resources, creating jobs and reducing poverty through more private investment. Efficient coastal surveillance will make it possible to ward off pirate ships with a view to protecting and rationally managing the fishery resources available. The various training sessions (250) planned under the project will help improve the performance of staff in the Fishing Administration and foster a spirit of enterprise among the sector's seafaring fishermen and specialised workers. The construction of the quay will contribute to creating the conditions propitious to the emergence of a national artisanal fishing sub-sector and to an increase in production by about 4050 tonnes. This will mean the creation of industries and ancillary services on land and favour the creation of numerous jobs.

8.1.2 Furthermore, thanks to better knowledge of the resources through the supportive research component, it will be possible to monitor both the stock quantity and quality and therefore to provide the country's authorities with the information they need to rationally manage resources. Moreover, the results of the financial and economic analysis reveal that artisanal fishing activities are viable. Consequently, the project will contribute to boosting food security and reducing poverty. The fishing sector support project is technically feasible, economically viable and socially desirable.

8.2 Recommendations

8.2.1 It is recommended that a loan not exceeding UA 4.29 million from ADF resources and a grant of UA 1.70 million be awarded to the Government of Guinea-Bissau with the purpose of implementing the project as described in this report subject to the conditions stipulated in the loan agreement.

a) Conditions Precedent to Entry Into Force of the Loan

8.2.2 Entry into force of the loan agreement shall be subject to the fulfilment by the Borrower of the conditions provided for in Section 5.0.1 of the General Conditions.

b) Conditions Precedent of First Disbursement

8.2.3 The first disbursement shall be subject to the fulfilment by the Borrower of the following:

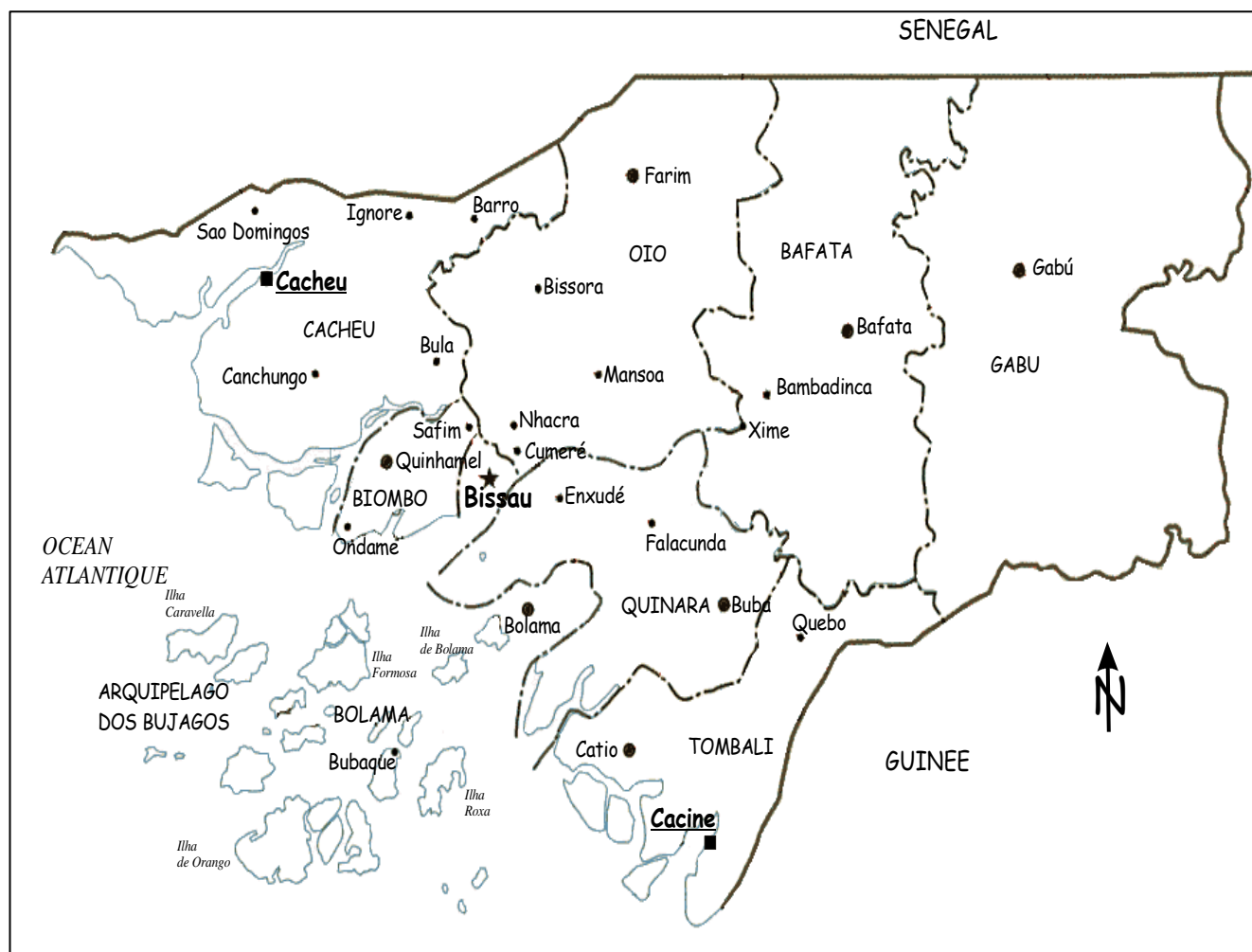
- i. evidence of assigning to the project, two professionals, a fishery biologist and fishery economist whose curriculum vitae shall be submitted to the Bank for approval;
- ii. evidence that offices for the project management team and premises for the Surveillance Centre [FISCAR] (cf. paragraphs 4.4.9) have been provided;
- iii. undertaking to regularly provide the Surveillance Centre with an adequate amount from the boarding and inspection taxes (paragraph 4.5.9);

- iv. proof of the creation of a Steering Committee comprising a representative of the Ministry of Economy and Finance, Natural Resources and the Environment, the General Fisheries Directorate, CIPA, FISCMAR, members of the project management team, two representatives of artisanal fishermen and two representatives of the private sector (5.2.3);
 - v. evidence of providing the project with premises for the Surveillance Centres of Bissau, Cacine and Cacheu.
- c) Other Conditions

8.2.4 The Government of Guinea-Bissau shall furthermore:

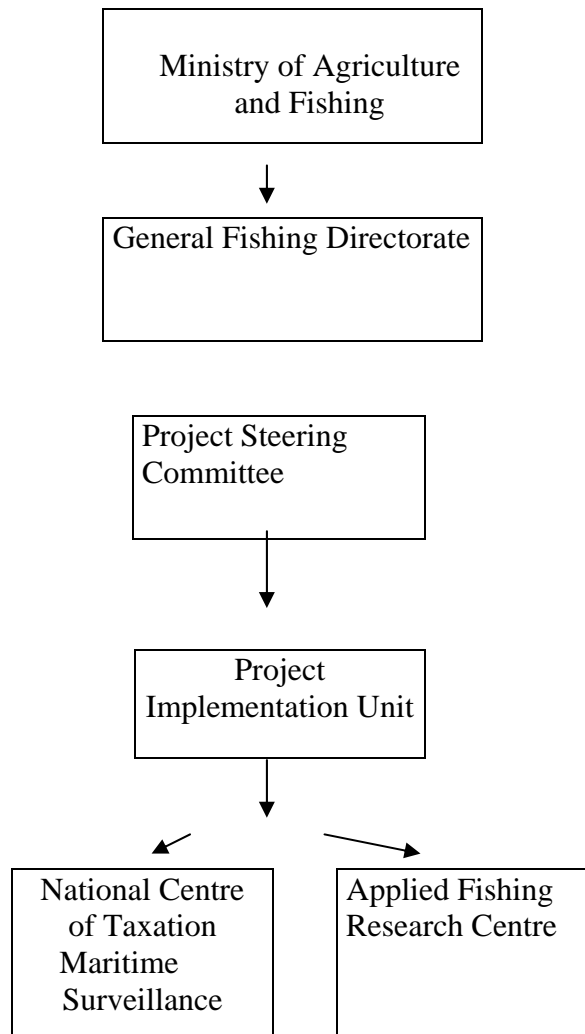
- i. submit for Bank approval six months after entry into force of the loan, draft agreements with CIPA for the supportive research and FISCMAR coastal surveillance component (paragraph 5.2.1);
- ii. promulgate the investment code established within the framework of this project not later than 31 December 2004; and
- iii. assign not later than 30 June 2003, to the Surveillance Centre, a Manager and three radio technicians for the Centre (cf. paragraph 4.5.9).

GUINEA-BISSAU: FISHING SECTOR SUPPORT PROJECT
ADMINISTRATIVE MAP



This map has been drawn by the African Development Bank Group exclusively for the use of readers of the report to which it is attached. The names used and the borders do not imply on the part of the Bank Group and its members any judgement concerning the legal status of a territory nor any approval or acceptance of these borders.

GUINEA-BISSAU: FISHING SECTOR SUPPORT PROJECT
PROJECT ORGANIZATION CHART



GUINEE BISSAU : FISHING SECTOR SUPPORT PROJECT
SUMMARY OF MITIGATING MEASURES OF THE MAIN POTENTIAL NEGATIVE IMPACTS

<u>POTENTIAL NEGATIVE IMPACTS</u>	<u>MITIGATING MEASURES</u>
Impact of infrastructure works on the health of workers and neighbouring inhabitants.	Take the usual precautionary construction measures. Sensitise workers to safety measures.
Soil erosion from construction works.	Restoration of the soils and drainage networks after works. Stabilisation of soils exposed to erosion; planting of hedges around infrastructure.
Risk of loss of natural habitats formed by the mangrove ecosystems; deforestation for smoking fish and construction activities.	Limit deforestation to the strict necessary; promote the use of improved energy-efficient stoves (ex: Chorkor type).
Risk of overfishing as a result of the increase in artisanal and commercial fishing activities.	Control artisanal and commercial fishing activities and ensure compliance with national regulations governing mesh size and prohibited fishing grounds; provide CIPA with logistic means for surveillance of the coasts and EEZ Better knowledge of fishery resources and promotion of their management in the long term; emphasis on the participatory approach. Sensitisation of the fishermen to the issue of rational management of natural resources. Research on continued assessment of fishery resources and stocks .
Public health and hygiene problems as a result of inadequate treatment of waste and refuse from the fishing infrastructure.	Install refuse bins in strategic places; design and implement integrated sensitisation campaigns (ex : fishing/environment /health) Sensitise fishing communities to good hygiene and sanitation practices. Include health clauses in the specifications of the port management company.
Threat of loss of the biodiversity that may result in the destruction of mangroves and pollution of the waters by oily effluents.	Prohibit dumping of solid wastes, crude effluents, fuel and lubricants into the sea; conduct training/ sensitisation activities.

Financial Analysis

[illegible]

Economic Analysis

19.47%

Guinea Bissau: Fishing Sector Support Project
Detailed Cost Estimates

(in CFAF thousand)

	ITEM	UNIT	U.P.	QUANTITY					BASE COSTS					F.E.	PHYS.		FIN.		
				2001	2002	2003	2004	TOTAL	2001	2002	2003	2004	TOTAL	%	TOTAL	CONT.			
Component A	ITEM	UNIT	U.P.	Q.Y1	Q.Y2	Q.Y3	Q.Y4	QTOTAL	B.C.Y1	B.C.Y2	B.C.Y3	B.C.Y4	B.C.TOTAL	DEV.%	DEV.	TOT	IMP	FIN	
	Training							0	0	0	0	0	0			0	0.00	TAF	
	=====							0	0	0	0	0	0			0	0.00	TAF	
	1.1 Training in Guinea Bissau							0	0	0	0	0	0	0	0	0	0.00	TAF	
	-----							0	0	0	0	0	0	0	0	0	0.00	TAF	
	Continuous training	lump	10000	1	1	0	0	2	10000	10000	0	0	20000	0	0	0	0.00	TAF	
	Continuous training	lump	10000	1	1	0	0	2	10000	10000	0	0	20000	0	0	0	0.00	GVT	
	Cold training	lump	700	6	3	0	0	9	4200	2100	0	0	6300	0	0	0	0.00	TAF	
	Cold training	lump	700	6	5	0	0	11	4200	3500	0	0	7700	0	0	0	0.00	GVT	
	Training equipment	lump	7000	0	1	0	0	1	0	7000	0	0	7000	100	7000	0.10	TAF		
	Cold instructor	m/month	500	12	12	0	0	24	6000	6000	0	0	12000	0	0	0	0.00	TAF	
	Continuous training	lump	7000	0	4	0	0	4	0	28000	0	0	28000	0	0	0	0.00	TAF	
	Seminar regulation	lump	7000	1	2	0	0	3	7000	14000	0	0	21000	0	0	0	0.00	TAF	
	Seminar regulation	lump	7000	2	2	0	0	4	14000	14000	0	0	28000	0	0	0	0.00	GVT	
	Seminar management	lump	7000	0	1	0	0	1	0	7000	0	0	7000	0	0	0	0.00	GVT	
	Seminar management	lump	7000	0	1	0	0	1	0	7000	0	0	7000	100	7000	0.00	TAF		
	1.2 Training grants								0	0	0	0	0			0	0.00	TAF	
	-----															0	0.00	TAF	
	Advanced studies	lump	7050	0	10	10	0	20	0	70500	70500	0	0	141000	100	141000	0.00	TAF	
	Training inspector	lump	7050	0	10	10	0	20	0	70500	70500	0	0	141000	100	141000	0.00	TAF	
	Training technique	lump	7050	0	6	6	0	12	0	42300	42300	0	0	84600	100	84600	0.00	TAF	
	Training in agronomy	lump	7050	0	3	0	0	3	0	21150	0	0	21150	100	21150	0.00	TAF		
	Training in management	lump	3000	0	5	0	0	5	0	15000	0	0	15000	100	15000	0.00	TAF		
	1.3 University training abroad								0	0	0	0	0			0	0.00	TAF	
	-----															0	0.00	TAF	
	Training	lump	12700	0	10	0	0	10	10	0	127000	0	0	127000	100	127000	0.00	TAF	
									BASE COST	55400	455050	183300	0	693750	78	543750			
									PHYS. CONT.	0	700	0	0	700	100	700			
									PRICE ESCAL.	2770	27980	14094	0	44844	72	32377			
								TOTAL COMP. A	58170	483730	197394	0	739294	78	576827				
	TECHNICAL ASSISTANCE																		
	=====																		
	T.A. Legal Expert (salary)	m/month	10600	0	12	0	0	12	0	127200	0	0	127200	100	127200	0.00	TAF		
	T.A Economist (salary)	m/month	10600	0	12	0	0	12	0	127200	0	0	127200	100	127200	0.00	TAF		
	Expert in procurement	m/month	10600	6	0	0	0	6	63600	0	0	0	63600	100	63600	0.00	TAF		
	T.A. Principal: Head	m/month	12000	0	12	12	0	24	0	144000	144000	0	288000	100	288000	0.00	TAF		
	Biologist	m/month	10600	0	12	10	0	22	0	127200	106000	0	233200	100	233200	0.00	TAF		
								BASE COST	63600	525600	250000	0	839200	100	839200				
								PHY. CONT.	0	0	0	0	0		0				
								PRICE ESCAL.	1590	26609	19223	0	47421	100	47421				
								TOTAL COMP. B	65190	552209	269223	0	886621	100	886621				

Guinea Bissau: Fishing Sector Support Project

Detailed Cost Estimate

(in CFAF thousand)

Annex 5

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Component B

ITEM	UNIT	U.P.	2001	2002	QUANTITY		TOTAL	BASE COSTS				F.E.	%	TOTAL	PHYS.
ITEM	UNIT	U.P.	Q.Y1	Q.Y2	Q.Y3	Q.Y4	QTOTAL	B.C.Y1	B.C.Y2	B.C.Y3	B.C.Y4	B.C.TOTAL	DEV.%	DEV. TOT	CONT.
Maritime Insp. and Surveillance															
=====															
1. Construction works															

Design, monitoring and supervision	lump	11688	1		0	0	1	11688	0	0	0	11688	100	11688	0
a) BISSAU												0		0	0
Rehab. Surveillance centre FISCMAR	m²	150	350		0	0	350	52500	0	0	0	52500	80	42000	0
b) CACINE												0		0	0
Surveillance Centre	m²	300	212		0	0	212	63600	0	0	0	63600	80	50880	0
c) CACHEU								0	0	0	0	0	0	0	0
Surveillance Centre	m²	300	100		0	0	100	30000	0	0	0	30000	80	24000	0
2. Equipment							0	0	0	0	0	0	0	0	0

							0	0	0	0	0	0	0	0	0
Communication equipment for Bissau	package	70000	0	1	0	0	1	0	70000	0	0	70000	100	70000	0
Communication equipment for Cachine and Cacheu bases	package	35000	0	2	0	0	2	0	70000	0	0	70000	100	70000	0
Boat maintenance system by radars	package	16000	0	2	0	0	2	0	32000	0	0	32000	100	32000	0
2 water reservoirs for the bases	package	17305		1			1	0	17305	0	0	17305	0	0	0
Small speed boats	U	70000	0	3	0	0	3	0	210000	0	0	210000	100	210000	0
4 generators 25 KVA. (Cacheu + Caio)	U	10000	0	4	0	0	4	0	40000	0	0	40000	100	40000	0
1 generators 50 KVA FISCMAR Bissau HQ	U	15000	0	1	0	0	1	0	15000	0	0	15000	100	15000	0
3. Operating							0	0	0	0	0	0	0	0	0

							0	0	0	0	0	0	0	0	0
Vessel operating/coastal launches	U	95600	0	2	2	2	6	0	191200	191200	191200	573600	100	573600	0
Vessel operating/coastal launches	U	51600	1	1	1	1	4	51600	51600	51600	51600	206400	0	0	0
Operating 2 generators (Cacheu + Caio)	U	4300	0	2	2	2	6	0	8600	8600	8600	25800	100	25800	0
Operating 1 generator FISCMAR (Bissau)	U	5700	0	1	1	1	3	0	5700	5700	5700	17100	100	17100	0
BASE COST								209388	711405	257100	257100	1434993	82	1182068	
PHY. CONT.								14610	45431	0	0	60041	92	55388	
PRICE ESCALATION								7694	41979	23934	32454	106061	71	75380	
TOTAL COMPONENT A								231692	798815	281034	289554	1601094	82	1312836	

Guinea Bissau: Fishing Sector Support Project
Detailed Cost Estimates
(in CFAF thousand)

	ITEM	UNIT	U.P.	QUANTITY					TOTAL	BASE COST				TOTAL	F.E.	PHYS.	FIN.	
				2001	2002	2003	2004	2001		2002	2003	2004	%		CONT.			
	ITEM	UNIT	P.U.	Q.Y1	Q.Y2	Q.Y3	Q.Y4	QTOTAL	B.C.Y1	B.C.Y2	B.C.Y3	B.C.Y4	B.C.TOTAL	DEV.%	DEV. TOT	CONT.	FIN	
S/Component A3	Supportive Research							0	0	0	0	0	0	0	0	0.00	ADF	
	=====							0	0	0	0	0	0	0	0	0.00	ADF	
	1. Supportive Research							0	0	0	0	0	0	0	0	0.00	ADF	
	-----							0	0	0	0	0	0	0	0	0.00	ADF	
	1.1 Assessment campaign							0	0	0	0	0	0	0	0	0.00	ADF	
	Per diem (30000*30j*4)+(30000*30j*6)	U	15000	2	2	2	0	6	30000	30000	30000	0	0	90000	50	45000	0.00	ADF
	Data processing	Lump	9300	1	1	1	0	3	9300	9300	9300	0	0	27900	0	0	0.00	ADF
	Data processing	Lump	9300	1	1	1	0	3	9300	9300	9300	0	0	27900	0	0	0.00	GVT
	Publication of results	U	6180	1	1	0	0	2	6180	6180	0	0	0	12360	0	0	0.00	ADF
	Publication of results	U	6180	0	0	1	0	1	0	0	6180	0	0	6180	0	0	0.00	GVT
	1.2 Equipment							0	0	0	0	0	0	0	0	0	0.00	ADF
	-----							0	0	0	0	0	0	0	0	0	0.00	ADF
	Office equipment/material package TA/CIPA	package	10000	0	1	0	0	1	0	0	10000	0	0	10000	100	10000	0.10	ADF
	BASE COST									54780	64780	54780	0	174340	32	55000		
	PHYS. CONT.									0	1000	0	0	1000	100	1000		
PRICE ESCALATION									2364	5394	7424	0	15181	19	2845			
TOTAL COMPONENT B									57144	71174	62204	0	190521	31	58845			

Guinea Bissau: Fishing Sector Support Project

Detailed Cost Estimate

(in CFAF thousand)

ITEM	UNIT	P.U.	2001	2002	QUANTITE		TOTAL	2001	2002	BASE COST		TOTAL	F.E.	%	PHYS.	FIN.
ITEM	UNIT	P.U.	Q.Y1	Q.Y2	Q.Y3	Q.Y4	Q.TOTAL	C.B.Y1	C.B.Y2	C.B.Y3	C.B.Y4	C.B.TOTAL	DEV.%	DEV.TOT	CONT.	FIN
Component C																
Strengthening of building infrastructure							0	0	0	0	0	0	0	0	0.00	ADF
=====							0	0	0	0	0	0	0	0	0.00	ADF
1. Landing quay construction							0	0	0	0	0	0	0	0	0.00	ADF
-----							0	0	0	0	0	0	0	0	0.00	ADF
Designs and supervision	Lump	162208	1	0	0	0	1	162208	0	0	0	162208	100	162208	0.10	ADF
Instal site/preliminary works	Lump	91780	0	1	0	0	1	0	91780	0	0	91780	100	91780	0.10	ADF
General earthworks	Lump	79200	0	1	0	0	1	0	79200	0	0	79200	100	79200	0.10	ADF
General earthworks	Lump	19800	0	1	0	0	1	0	19800	0	0	19800	0	0	0.10	GVT
Platform	Lump	400000	0	1	0	0	1	0	400000	0	0	400000	80	320000	0.10	ADF
Landing quay	Lump	200000	0	1	0	0	1	0	200000	0	0	200000	80	160000	0.10	ADF
Sanitation	Lump	50000	0	1	0	0	1	0	50000	0	0	50000	80	40000	0.10	ADF
Water supply	Lump	12000	0	1	0	0	1	0	12000	0	0	12000	80	9600	0.10	ADF
Electrification	Lump	80000	0	1	0	0	1	0	80000	0	0	80000	100	80000	0.10	ADF
Fence	Lump	35300	0	1	0	0	1	0	35300	0	0	35300	0	0	0.10	GVT
2. Building Construction							0	0	0	0	0	0	0	0	0.00	GVT
-----							0	0	0	0	0	0	0	0	0.00	GVT
Port administration building	m2	300	0	0	350	0	350	0	0	105000	0	105000	80	84000	0.10	ADF
First Aid Centre	m2	300	0	0	150	0	150	0	0	45000	0	45000	80	36000	0.10	ADF
Rehabilitation building/workshop repairs	m2	150	0	0	1325	0	1325	0	0	198750	0	198750	80	159000	0.10	ADF
Material/fishing equipment warehouse	m2	150	0	0	416	0	416	0	0	62400	0	62400	100	62400	0.10	ADF
Material/fishing equipment warehouse	m2	150	0	0	179	0	179	0	0	26850	0	26850	0	0	0.10	GVT
Fresh fish market	m2	200	0	0	630	0	630	0	0	126000	0	126000	80	100800	0.10	ADF
Net mending shed	m2	150	0	0	480	0	480	0	0	72000	0	72000	100	72000	0.10	ADF
Net mending shed	m2	150	0	0	120	0	120	0	0	18000	0	18000	0	0	0.10	GVT
BASE COST								162208	968080	654000	0	1784288	82	1456988		
PHYS. CONT.								16221	96808	65400	0	178429	82	145699		
PRICE ESCALATION								4461	64609	67730	0	136800	67	91420		
TOTAL COMPONENT C								182890	1129497	787130	0	2099517	81	1694107		

Guinea Bissau: Fishing Sector Support Project

Detailed Costs Estimate

(in CFAF thousand)

	ITEM	UNIT	U.P.	QUANTITY				TOTAL	BASE COST				F.E.		PHY.			
				2001	2002	2003	2004		2001	2002	2003	2004	TOTAL	%	TOTAL	CONT.	FIN.	
Component D	ITEM	UNIT	U.P.	Q.Y1	Q.Y2	Q.Y3	Q.Y4	QTOTAL	B.C.Y1	B.C.Y2	B.C.Y3	B.C.Y4	B.C.TOTAL	DEV.%	DEV.TOT	PHY.	FIN	
	Project management							0	0	0	0	0	0	0	0	0	0.00	ADF
	=====							0	0	0	0	0	0	0	0	0	0.00	ADF
	1. National staff							0	0	0	0	0	0	0	0	0	0.00	ADF
	-----							0	0	0	0	0	0	0	0	0	0.00	ADF
	Salaries of national counterparts	m/month	150	24	24	24	24	96	3600	3600	3600	3600	14400	0	0	0	0.00	GVT
	Benefits of national counterparts	m/month	450	24	24	24	24	96	10800	10800	10800	10800	43200	0	0	0	0.00	ADF
	Salary - Secretary	m/month	50	12	12	12	12	48	600	600	600	600	2400	0	0	0	0.00	GVT
	Benefits - secretary	m/month	100	12	12	12	12	48	1200	1200	1200	1200	4800	0	0	0	0.00	ADF
	Salary - accountant	m/month	100	12	12	12	12	48	1200	1200	1200	1200	4800	0	0	0	0.00	GVT
	Benefits - accountant	m/month	250	12	12	12	12	48	3000	3000	3000	3000	12000	0	0	0	0.00	ADF
	Salary - administrative worker	m/month	100	12	12	12	12	48	1200	1200	1200	1200	4800	0	0	0	0.00	GVT
	Benefits - administrative worker	m/month	200	12	12	12	12	48	2400	2400	2400	2400	9600	0	0	0	0.00	ADF
	Salary - drivers	m/month	30	24	24	24	24	96	720	720	720	720	2880	0	0	0	0.00	GVT
	Benefits - drivers	m/month	60	24	24	24	24	96	1440	1440	1440	1440	5760	0	0	0	0.00	ADF
	3. Equipment							0	0	0	0	0	0	0	0	0	0.00	ADF
	-----							0	0	0	0	0	0	0	0	0	0.00	ADF
	Computer/printer/software	package	2823	5	0	0	0	5	14115	0	0	0	0	14115	100	14115	0.10	ADF
	Vehicle management team and technical assistants	U	17600	3	0	0	0	3	52800	0	0	0	0	52800	100	52800	0.10	ADF
	Office equipment/materials	lump	25000	1	0	0	0	1	25000	0	0	0	0	25000	100	25000	0.10	ADF
	4. Operating							0	0	0	0	0	0	0	0	0	0.00	ADF
	-----							0	0	0	0	0	0	0	0	0	0.00	ADF
	All TA vehicles and equipment management	lump/year	5000	3	3	3	3	12	15000	15000	15000	15000	60000	100	60000	0.00	ADF	
	Rents and maintenance: office	ft/month	1100	12	12	12	12	48	13200	13200	13200	13200	52800	0	0	0	0.00	GVT
	Electricity, water, telecom and consumables	ft/month	2000	12	12	12	12	48	24000	24000	24000	24000	96000	0	0	0	0.00	ADF
	5. Monitoring control audit							0	0	0	0	0	0	0	0	0	0.00	ADF
	-----							0	0	0	0	0	0	0	0	0	0.00	ADF
	Audit	lump	15000	0	1	1	1	3	0	15000	15000	15000	15000	45000	100	45000	0.00	ADF
	Mid term review	lump	30000	0	0	1	0	1	0	0	30000	30000	0	30000	100	30000	0.00	ADF
Monitoring workshop	lump	3000	1	0	1	1	3	3000	0	3000	3000	3000	9000	0	0	0.00	ADF	
Trip to ADB headquarters	lump	1000	1	1	1	1	4	1000	1000	1000	1000	4000	50	2000	0.00	ADF		
BASE COST									174275	94360	127360	97360	493355	46	228915			
PHYSICAL CONT.									9192	0	0	0	9192	100	9192			
PRICE ESCALATION									6258	8090	15191	17575	47114	26	12277			
TOTAL COMP. D									189725	102450	142551	114935	549660	46	250384			

Annex

CORRIGENDUM

The purpose of this corrigendum is to inform the Board of Directors of the modifications made to the following tables:

1. Table 4.5e has been corrected because of an error in the grant total for the table. The initial total of UA 6.62 million should be modified to UA 4.85 million.

Table 4.5e
Expenditure Schedule for ADF/Government Financing
(UA million)

<u>Sources</u>	2001	2002	2003	2004	Total
ADF	0.62	2.10	1.22	0.35	4.29
Government	0.10	0.19	0.17	0.10	0.56
TOTAL	0.72	2.29	1.39	0.45	4.85

2. Table 5.1 on the implementation schedule has been updated to take into account the delay in presenting the Appraisal Report to the Board of Directors. We apologize for this and request that you note the modifications.

Implementation Schedule

Activities / Actions	Initiators	Start	Duration
Board Approval	ADF	October 2001	1 day
Signature of the Loan Agreement	GVT/ADF	December 2002	
General Procurement Notice	MPM/ADF	January 2002	
Positioning of Loan and First Disbursement	MPM	March 2002	
Establishment of the PIU, and staff assignment and recruitment	MPM/ADF	March 2002	3 months
Recruitment of Project Manager and TA staff	MPM/ADF	March 2002	6 months
Recruitment of Consulting Firm for the Engineering Design	MPM/ADF	March 2002	6 months
Preparation of the First Annual Programme	MPM	July 2002	
Project Launching Workshop	MPM	July 2002	
Preparation of the Engineering Design for the Civil Works	PIU	September 2002	3 months
Conduct of Studies for the Investment Code	PIU	November 2002	18 months
Conclusion of Agreements with CIPA and FISCAR	PIU	December 2002	
Invitation to Bid for the Civil Works	PIU	December 2002	4 months
Civil Works	PIU	May 2003	12 months
Planning Workshop: Preparation of Project Logical Framework, Overall Operating Plan, and the Operating Plan for the First Year	PIU	August 2003	1 week
Training	PIU	January 2003	4 years
Auditing of Accounts	PIU/consult.	October 2003	3 years
Final Evaluation and Workshop	PIU/consult.	August 2006	8 days